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ART. I.—*Typhoid Fever as it appeared in the vicinity of Heltonsville during the winters of* 1846–'7–'8. By Dr. M. H. FEE, of Heltonsville, Indiana.

The winters above indicated were characterized by great and frequent thermometrical, barometrical, and electrical changes. Torrents of rain fell frequently, and the weather was generally wet, followed, for a few days, by great depressions of temperature. It is not at all strange, I think, that amid so much wet, our diseases were generally of the asthenic type. Typhoid fever prevailed to a considerable extent, but was confined almost entirely to our streams and alluvions. During the prevalence of this fever in the lowlands, catarrhal fever visited the highlands. Chronic cases of ague were constantly relapsing, with tendency to dropsical effusions.

Cancrum oris prevailed almost universally; but was much worse in the low damp air of the streams. In short, there was unmistakeable evidence of diminished vital resistance. We had three varieties of typhoid which I shall designate typhoid with *Peyerian complication;* typhoid with *pneumonic complication;* and typhoid with *congestion of the portal circulation.* In the remarks which follow I shall keep this division in view. For the sake of perspicuity I shall speak 1st, of the initiatory symptoms of each variety; 2d, of the symptoms after complete development; 3d and last, of the treatment which proved most successful.

1st. In the Peyerian form, I have seen patients sometimes for ten days before active development, with melancholy appearance, eyes sunken and inanimate; icterode cast of the skin and conjunctiva; slight *malaise;* confusion of ideas, and intellectual dullness; sudden and transient flushing of the face; sense of stricture across the forehead; slight vertigo toward evening; heavy sleep, with occasional muttering or groaning; tongue coated with a white fur, the papillæ showing enlarged and intensely red through the coat; a sense of weight and dryness in the bowels generally, with constipation. The urine is mostly scanty, thick, and red; aching in the loins; the hands and feet constantly icy cold, and not sensible to the impression of capsicum. I will observe here, that this enlargement of the papillæ of the tongue is an infallible diagnostic, in adults, of inflammation of Peyer's glands.

2d. *Of the initiatory symptoms of the pneumonic variety.*—In this variety we have the usual symptoms of catarrhal fever, viz: flushed face; injected and watery eyes; acute pain in the forehead; hyper-schneiderian secretion; soreness of the fauces; thickness of voice; thoracic stricture; cough, with transient pains in one or both lungs; great sensitiveness to the impression of cold; slight fe-

brile exacerbations towards evening; stupor of the intellectual faculties; violent cough during the early part of the night; a disposition to sleep. The bowels are rarely prominently deranged. These are some of the most prominent initial symptoms.

3d. *Of the initial symptoms of the portal variety.*—In this variety, in addition to the usual symptoms of the other forms of typhoid, indicating an asthenic tendency, we have usually a fulness and pain of the right hypochondriac region, with frequent and easy discharges of a white thin foamy fecal matter, destitute of bile; great nervousness, with weakness of the joints; syncopic tendency upon the slightest exertion; aching of the back, etc., etc., etc.

1st. *Of the symptoms after complete development of the Peyerian variety.*—The papillæ of the tongue much enlarged, showing red through a brownish white fur; edges and tip of tongue dry and red; stupor, with somnolency; disinclination to answer questions; taciturnity, answering as much as possible by monosyllables; pulse about 120, sometimes 140 per minute; gurgling sound in the bowels when liquids are swallowed; tenderness just below the umbilicus; vivid, circumscribed flushes upon the face and neck on the slightest exertion; constipated bowels; urine scanty and red, sometimes copious and pale; nervous twitchings. As the disease advances, muttering delirium appears; meteorism; floccitacio; roseola on the neck and breast; papulæ on the neck, which is sallow, enlarged, and in a few days filled with a limpid serum; the lips and teeth covered with sordes; the tongue covered with a dark brown and cracked coat, with patches clean, florid, dry, and covered apparently with a delicate membrane; retention of urine, or stillicidium. As the disease advances the tongue becomes pitted, which pits are filled with what appears to be pus. This is a certain indication of ulceration of Peyer's and Brunner's

glands. About this time a gentle, sometimes profuse, diarrhea comes on, at which time we may frequently trace in the feces globules of matter as large as "bird shot," evidently from the ulcerated glands, etc., etc.

2d. *Symptoms after complete development of the pneumonic variety.*—Harrassing cough; pain in one, sometimes both lungs, shooting up into the shoulders; inability to lie on the affected side; stridulous respiratory murmur in the affected lung; body inclined towards the affected side; quiescent state of that side of the chest; diaphragmatic respiration; coughing up of a greenish viscid mucus, sometimes tinged with blood; rapid panting breathing; heavy expression of the eyes; tongue covered with a whitish yellow fur; anorexia, with pyrexia; bowels not difficult to move; pulse full, frequent, and moderately hard, though of easy compression; distinct chill, or at least a cold stage, every morning about 9 o'clock, followed by a moderate degree of fever till the middle of the evening; considerable dyspnea during the febrile excitement; considerable desire for cool drinks, with acute pain in the head, and circumscribed flush on the centre of one, sometimes both cheeks, etc.

3d. *Symptoms after complete development of the portal variety.*—If the congestion is of some considerable antiquity, the stomach will be found quite irritable, rejecting all liquids and solids almost as soon as they are swallowed; but if of more recent date, the stomach does not sympathize strongly. We have incessant purging of watery, colorless, or white rice-water discharges, without a trace of bile; no thirst of cosequence; the surface blue and shrunken, with *cutis anserina*. The patient seems almost a third less than formerly; great anxiety; grunting expiration; constant syncopic tendency; hands and feet icy cold, and the skin on them drawn into wrinkles, of a dirty white appearance, as we often see it in cholera. There are frequently spasms of great severity

during this collapsed stage, as I am in the habit of calling it. Last winter, I had a patient who had forty-eight alvine dejections, of the above character, in twenty-four hours, during the congestive stage. The pulse is small, almost imperceptible, and rapid, sometimes amounting to 150 in the minute. The tongue is pale and bloodless, covered with a long pale fur; upon protruding the tongue it is found broad, flabby, and tremulous.

1st. *Treatment of the Peyerian variety.*—In this complication I never resort to bloodletting. Indeed, when we consider that local glandular inflammation is but a secondary feature, and that a disease of asthenic tendency is the subject of our treatment, we may well pause and inquire, is not general bloodletting, to say the least of it, a remedy of very doubtful utility? There is already diminished vital force; the all important question then is, is general bloodletting likely to increase the vital force? I think not. The great desideratum is to change the morbid action of the system, without diminishing its resources. When called to a patient with this complication, I am in the habit of applying wet cups to the abdomen, and in this way drawing from two to four ounces of blood, and afterwards of covering the bowels with a large emollient poultice. If this treatment has been promptly and energetically adopted, it will be found that the papillæ of the tongue have diminished much in size, and lost, in some good degree, their vivid redness; I then give from thirty to forty grains of calomel, combined with from a half to three-quarters of a grain of morphia, to adults, which I let remain from sixteen to twenty-four hours, then move off with Seidlitz powder, and laxative and stimulant enemata. When I have evidence of a healthy action of the liver, I give no more mercurials, nor active purgatives, but use Seidlitz powders exclusively. For the *calor mordax* I sponge the body

with warm water, and administer spirits of nitre and lemon juice every two hours. During the quieting effect of the calomel with the morphine, the tongue frequently becomes partially clean; but when the influence of the morphine has passed off, and the irritant effects of the calomel prevail, it is for a time often covered with a red, dry, and fine membrane, such as is seen thrown out over a blistered surface when about to commence the reparation of the cutis. But so soon as the liver has poured out a large quantity of vitiated bile, and this has passed off, we find the tongue suddenly become moist and much less florid, and the pulse reduced in frequency twenty to forty beats. Under the subsequent use of Seidlitz powder, or other mild laxatives, the tongue gradually loses its redness and the papillæ their size, until the normal condition of all the functions of the system is reëstablished. In this complication quinine canno be used in any dose, without positive injury, until after the local inflammation has terminated in resolution. If, after this happens, there be still daily exacerbations, quinine may be advantageously administered. If given before this time, the tongue becomes dry, and the bowels painful, without the slightest good impression being made on the succeeding paroxysm. If, despite my endeavors, the Peyerian glands go on to suppuration, known by pits of whitish yellow matter appearing on the tongue, I have been in the habit of meeting it by blistering the abdomen, and exhibiting nitrous, or sulphurous acid; but with the change my views have lately undergone, I should meet it with grain doses of nitrate of silver, every three hours, till the pits throw off the matter and assume a florid appearance, after which I should exhibit balsam copaiva or turpentine. Blisters, I think, only serve to retard the process of cicatrization of the glands by diverting to the surface, blood whose presence

in the interior is all important. It would certainly be bad policy in an indolent ulcer of the leg to draw a blister on the thigh.

2d. *Treatment of the pneumonic variety.*—This variety, according to my experience, possesses more of the sthenic character than the one just treated of. The fever is more external, more completely developed and the pulse is of greater volume and hardness, than in either of the other varieties. If the pain in the chest be severe, and the cough violent, I premise a general bleeding, sufficient to make a decided impression on the pulse. If, after the bleeding, there be still considerable pain, I apply a few wet cups over its seat, followed by a warm emollient poultice. After proper depletory measures, I give thirty grains of calomel with half a grain of morphine, followed in twelve hours by half an ounce of castor oil. This generally serves to quiet the nervous irritability, and partially restore the secretions. For restoring the bronchial secretions I exhibit, every two hours, ½ʒf. spirits nitre, ʒss.f. syrupus scillæ, and ⅛gr. tart. antimony, until well digested pus makes its appearance in the sputa. This course, aided by blisters or powerful rubefacients upon the chest, generally reëstablishes the suspended secretion in three or four days. Mucilaginous drinks are freely used in the mean time. During the whole course I exhibit, at bed time each night, five grains blue mass, for the purpose of maintaining the biliary secretion. If the bronchial secretion becomes excessive, and the pulse small and rather weak, I give a tablespoonful, every three hours, of the following mixture:

℞. Infus. Seneg. ℥viii.
Aq. ammoniæ ʒi.
Syrup. scillæ ℥ss.

If, after the secretions have been pretty well established,

there be periodic exacerbations of fever, I give quinine with decided advantage.

3d. *Treatment of the portal variety.*—In this variety, the first indication to be fulfilled is to equalize the circulation. The best way I have found to do this, is to rub the back and limbs freely with a stiff brush, as long as the patient will endure it. After this, apply to the parts just rubbed a flannel cloth, imbued moderately with very hot spirits of turpentine. During this operation let some one pour boiling water on some good wine or brandy, and let the patient drink it; this will aid materially in bringing about reaction. At the time of reaction, and for some time after, we are to watch closely that local visceral inflammation of some kind be not developed. As a general rule, however, the reaction is not violent, and we rarely have any very serious lesions. As soon as the dangers usually attending reaction are past, I turn my attention to the correction of the vitiated, or to the reëstablishment of the suspended, secretions. The secretions most implicated are those of the liver and skin; nothing suits the former better than mercury, combined with morphine; indeed, without some form of opium the calomel would pass rapidly through the bowels without effecting the secretion of bile. Thirty grains of calomel with one of morphine will generally arrest the diarrhea and keep the bowels quiet for twelve or sixteen hours—at the expiration of which time it may be moved off with castor oil. Blue mass I give occasionally to maintain the impression made by the calomel on the liver. When the bowels need moving, it should be done with castor oil, guarded with paregoric. For restoring the secretion of the skin I use nothing but spirits of nitre, aided by drinks of tea of M. pulegium, and warm bricks wrapped in wet cloths laid in bed near the patient. If diurnal febrile excitement continues after the secretions have been attended to, I use quinine to arrest them.

With this treatment in the years above specified, I have lost but 5 per cent. of all the cases of this fever treated in a scope of country of about ten miles square, abundant in streams and bottoms.

January, 1849.

ART. II.—*Cases of Acute Articular Rheumatism, treated in Blockley Hospital.* By B. F. WENDEL, M.D., Assistant Physician.

CASE I.—K., aged 32 years, from Ireland, intemperate, came into my wards on the 15th December, with acute articular rheumatism, following upon a debauche, during which he had lain out for several nights. He had been subject to rheumatism during many past winters, and to wandering pains in the limbs from any sudden change in the weather, besides which his parents had been subject to the same affection. I found him with a countenance indicative of a hard drinker; a full, tense pulse; skin hot and dry, with a disagreeably hard feel; high colored and scanty urine, depositing a plentiful reddish precipitate. The affection was confined principally to the ancles, knees, wrists, and elbows, most of which were considerably swollen, especially the knees and wrists, the skin over which was tense and extremely tender to the touch. The poor fellow appeared in great distress, the slightest movement causing him to cry out with the pain.

His bowels being constipated, I ordered him four compound cathartic pills, to be followed in the morning by oil.

16th. His bowels have been freely moved without the assistance of the oil; he seems to be suffering more pain, perhaps caused by the movements of getting up to

stool, and seems a little flighty. I prescribed for him nitrate of potash, ℥j, to be dissolved in a pint of water, of which he was to take a wineglassful every three hours. In the evening, his condition was about the same, and I ordered him a pill containing one grain of opium.

17th. He spent a restless night, frequently crying out. His skin is not so harsh, and his pulse is reduced slightly in force, but still continues frequent. He is ordered to continue the potash.

In the evening he was easier; he has made considerable water of a high color, and his skin is beginning to secrete.

18th. Pain in the affected joints is much abated; skin moist; tongue pretty clean; bowels moved, and altogether his condition is better. In addition to the potash, which was continued, he was ordered to be cupped on the sides of both knees, and in the neighborhood of the shoulders.

In the evening I found him resting well; pulse not so frequent, and skin moist.

19th. The cupping has had a happy effect in reducing somewhat the swelling about the joints. His urine is more copious, and presents a better color, but still depositing a plentiful precipitate. He says he is better.

From this time he continued to improve rapidly under the potash alone, until the 21st, when he told me he was purging severely, with much pain in the bowels. The pain in the joints being nearly gone, and but little swelling remaining in them, he was ordered to cease taking the potash, and use the following mixture:

℞. Ol. Ricini, ℥ij.
Tr. opii., ℥iij. M.

Of which take a teaspoonful every four hours.

In the evening he had less pain in the bowels, and they were not so frequently moved as on yesterday.

22d. The purging has nearly ceased, and the abdominal pain is entirely gone; all traces of the rheumatism have disappeared save some swelling in the knees and wrists, for the last of which he was told to go to the hydrant every morning and let the water run on the swollen joints. In three or four days the swelling had mostly disappeared, and he was able to resume his occupation.

CASE II.—S., a day laborer, aged 29 years, of temperate habits, came into the wards last evening after my visit. This morning I find him with much swelling of the knees and ancles, intense tearing pains, which he describes as being "murderous;" a very quick, frequent and hard pulse; tongue with a heavy white fur in the middle, and red at the tip and edges; eyes injected; respiration hurried; and the action of the heart tumultuous. This man was put upon low diet, and directed to take the potash in the same manner as the first one. That evening there was no perceptible change.

December 11th. But little alteration in the patient. He has a disagreeable acid smell, and the nurse informs me that he perspired greatly during the night, so much so as to moisten the sheets.

12th. He rested somewhat better last night, and feels easier this morning. His bowels are open, and there may be some reduction in the quickness of the pulse, but the frequency continues.

13th. The patient has improved. His countenance is better; his breathing but little hurried; his pulse reduced in frequency, and fuller; skin moist, but still exhaling a disagreeable odor; urine more copious, and of a more natural color. There was no farther change but for the better up to the 18th, when he was pronounced convalescent.

Case III.—K., aged 40 years, intemperate, a large, robust man, was engaged in ditching somewhere near the Schuylkill on the 12th of December, and having overheated himself, he went to the river and washed his face, and sat down on the bank for some half hour. Perspiration was thus suddenly checked, and he observed while walking home that he had taken cold. That night his cold grew worse, he was feverish, and had chilliness, with wandering pains in his limbs and body. The next day he kept his room, and was very unwell all day, the cough and pain increasing, the pain confining itself principally to the joints, which also began to swell. He came into hospital on the 14th, and I found him in the evening of that day with a very hot and dry skin; full, bounding pulse; intense headache, etc., etc. He was ordered a dose of calomel and rhubarb to open his bowels, and I deferred making a more minute examination until the morning.

15th. His bowels have been freely moved, but with no alteration of his symptoms. Seeing he had a distressing cough, I examined the chest. Percussion revealed nothing, but I could distinguish a diffused sonorous sound on putting my ear to the chest; also a slight sibillant, and I thought perhaps a slight mucous, sound. The expectoration was scanty, and what there was being a globular, whitish colored mucus, covered with a considerable frothy matter. He did not complain of any pain in the chest, but of tightness, difficulty of breathing and of expectorating. The rheumatism was confined to the knees and ancles, and muscles of the legs. The joints were considerably swollen, as also the back part of the leg. Cut cups were ordered to the sides, and after this they were to be covered with a poultice of flaxseed, and the following mixture was ordered:

℞. Decoct. senega, ℥v.
Tr. squill, ℥ij.
Tr. digitalis, ℥ij.
Carb. ammonia, gr.xv. M.

Of which take a tablespoonful every three hours.

For the rheumatism the nitrate of potash was ordered, and given in the same quantities, etc., as before stated.

In the evening his condition was about the same, and he was ordered not to take the cough mixture so often.

16th. Rested but little during the night. The sibillant rhonchus was not audible, only the sonorous and the mucous mingling. Does not complain so much of the tightness of the chest. Pulse continues frequent, but not so full; skin still hot and dry; bowels have been moved during the evening. Continue the same prescriptions.

17th. Pulse less frequent; skin slightly moist; urine more copious. Auscultation still reveals the sonorous and mucous sounds, but the breathing is nearly of natural frequency.

18th. Rested well last night, being only occasionally wakened by the cough. The sonorous has almost given way to the mucous râle; the pulse is reduced in frequency and force; skin pleasant; urine still more copious. He expectorates freely and easily, and the expectoration is opaque, white, and frothy. To be again cupped on the chest, and continue the prescriptions as above.

19th. Is evidently better; the tongue has cleaned handsomely, and the pulse is nearly natural, as is also the breathing. The sonorous sound is almost if not entirely gone, and the mucous rattle seems to be diminishing.

20th. Cough not very troublesome; rheumatic pains have diminished, but the swelling of the joints still continues.

21st. Expectoration not so copious; rheumatism mostly abated, and the mucous rattle is diminishing. He continues the medicines as before, but in the cough mixture, the same quantity of paregoric is substituted for the tincture of digitalis.

He continued to improve up to the 28th, when all traces of the rheumatism were gone, save perhaps a little swelling, and there remained of his disease but a slight bronchitis, which it was not thought worth while to notice.

Case IV.—L., came into my wards on December the 28th, complaining of continued pains in the elbows, knees, wrists, and ancles, from which he had been suffering for two or three days. He is a hearty German, of temperate habits, aged 25 years, who has been generally healthy, but subject to coryza from the slightest exposure.

His pains seem to be violent, but there is no swelling of the joints, and still they are tender to the touch, and quite warm. The symptoms are such as one would expect to find in an inflammatory fever, the pulse perhaps not being so full and frequent, and the urine not depositing so copious a sediment as in this form of the phlegmasiæ.

His bowels being in good condition, and wishing to try the effect of Cimicifuga in rheumatism, I ordered him to have ten grains of the powder every three hours.

It is useless to detail the daily symptoms of this patient under the use of the cimicifuga, and it will suffice to say that he continued it for a week, meanwhile taking anodynes to allay his pain, and afford him sleep, but all without avail. He was then put upon nitrate of potash, of which he took ten grains every three hours the first day, and fifteen grains every four hours the next day.

The change was soon marked in his condition; his pulse soon became natural; his skin began to act; his urine became of a more natural color; and in five days from the time he commenced taking the potash, he was almost a sound man.

Philadelphia, January 18, 1849.

ART. III.—*A brief account of a Fever which prevailed in the mountain district of Tennessee, in the Fall and Winter of* 1847–'8. By Dr. M. Y. BROCKETT, of Spencer, Tennessee.

The region of country in which the fever of which I propose to give a short account prevailed, lies to the east of Sparta, and is watered by the Cany fork of Cumberland river. The country is mountainous and free from swamps or collections of stagnant water, and the streams are bold and clear. Sandstone and limestone both enter into the geology of the country, so that we have both free stone and limestone water. No local cause of disease appears anywhere upon the surface.

The summer of 1847, and the first months of autumn were unusually wet and warm. Few thunder storms occurred, but not unfrequently the rains continued for eight or ten days, in consequence of which the streams were swollen to an uncommon degree.

The fever which succeeded this extraordinary weather was not confined to the valleys and margins of streams, but appeared also on the tops of the mountains. The type was typhoid, as will appear from the history of the following case:

Miss M., æt. about 14 years, was seized with the disease on the 2d of December, and on the 4th I found her laboring under the following symptoms: severe pain in

the head; general debility; listlessness, and dullness of intellectual faculties; intolerance of light; anorexia; constipation; nausea. Her pulse was quick, but soft and yielding; surface not preternaturally hot; great thirst; sleeplessness; tongue coated with a brown fur. In this state she remained until the fifth day, the symptoms appearing rather to progress. On the sixth day they were decidedly aggravated. The tongue became black; sordes formed on the teeth, and these phenomena were attended with low muttering delirium, and extreme restlessness. Bowels still constipated; retention or suppression of urine; eyes suffused, and with a wild expression. This case presents a fair type of the disease.

In the treatment of this fever I did not have recourse to the lancet, for the reason that one of the first cases appeared to me sensibly injured by the abstraction of blood. It fell into the hands of a physician of Sparta who bled the patient; and this was one of the few fatal cases that occurred. The symptoms did not seem to justify bloodletting. The strength of the patients was not equal to it. They were exhausted from the onset of the disease. In no case were the effects of venesection satisfactory.

The first medicine I gave, when called to a case, was a dose of calomel and jalap. If they did not produce a copious evacuation in the course of eight hours, they were followed by castor oil or senna. The stools were generally black, sometimes bloody; and yet the latter symptom was not serious, for uniformly when it made its appearance I was able to prononunce a favorable prognosis. The cerebral excitement was allayed by the alvine discharges, and when they were attended by pain in the bowels, and tenesmus, I had recourse to small doses of calomel, ipecacuan, and opium, alternated with olive oil, spirits of turpentine, and tinct. opium, and these remedies never failed to relieve the intestinal uneasiness,

and allay the febrile excitement. Convalescence was speedily established, the disease appearing to be cut short by the treatment.

The following are the minutes of a case of the fever treated by my partner, Dr. D. G. Hughes:

Mrs. C. was taken, about the 12th of Oct., with headache and a feeling of general debility.

13th. Dry, hot skin; thirst; constipated bowels, and all the symptoms of a well marked case of fever.

14th. To the other symptoms, nausea and frequent efforts at vomiting have been added. Calomel and rhubarb were given, and their action promoted by an enema of senna tea. Great relief of the head followed their action upon the bowels; but in place of the cerebral symptoms, griping and other indications of intestinal irritation appeared. For these, I prescribed olive oil, spirits of turpentine, and tinct. opium.

15th. Symptoms are unchanged; bowels loose, the discharges being green and curdled; breath fetid; cough, and free expectoration of mucus. Prescribed hive syrup, syrup of squills, and liquorice, which excited vomiting.

16th. Cephalic symptoms renewed. Blister to the nape of the neck.

17th. Retention of urine; symptoms otherwise the same. Treatment—calomel, ipecacuan, and morphia in minute doses.

18th. Tongue black and chapped, teeth covered with sordes. Wine was given, but aggravated the symptoms. Continue treatment.

20th. Patient convalescent, having slept soundly and awoke refreshed.

I do not present these as cases of true typhoid fever, but as cases of bilious fever of a typhoid character. They exhibited many of the marks of the former disease.

but ran their course more rapidly than it is understood to do. The interesting feature regarding it, if interest it possesses at all, is that it appeared in a mountainous region of country, which, from its aspect, would seem to be free from all sources of malaria, and followed a season which, by its excessive humidity, might generate the poison of fever in any situation where there was the requisite amount of heat and vegetable matter.

Before closing this communication I will detail the particulars of a fatal case of exanthematous disease which interested me a good deal in its progress, and possibly may have interest for the readers of the Journal.

I was called in September last to see a child, 5 years of age, laboring under what I regarded as a form of erysipelas. Its lower extremities were covered with a papular eruption, attended by intolerable itching. I used antiphlogistic remedies, under which the affection seemed to be giving way, and after a few days I dismissed my little patient as convalescent. I heard nothing from him for three weeks, when I was again called, and found that the eruption had spread extensively over the abdomen. Large indurated ulcers in a short time appeared on every part of his body, under the exhausting effects of which he rapidly sunk.

Spencer, January 30th, 1849.

ART. IV.—*A Case of Meningo-Cerebritis.* By Dr. THOMAS C. OSBORNE, of Erie, Alabama.

I was called, on the 30th of November, 1847, to prescribe for Esther, a black woman, 35 years of age, on account of what was thought to be a troublesome headache, of which she had been complaining for more than a month, but which, until three or four days previously

had not compelled her to take her bed. It had been noticed that there was a gradually increasing tendency to moroseness and mental imbecility, but as she was lately purchased much of her complainings were attributed to a stubborn disposition to resist authority.

I found her in the following condition: Patient shudders if exposed to the air; stupid, but when roused answers intelligibly in the recumbent, but confusedly in the sitting, posture; surface pleasantly warm and moist; pulse 70, soft, and of ordinary volume; respiration natural; tongue clean; eyes heavy, and pupils dilated and immovable; hearing good; complains of violent pain in the head, and in the lower part of the abdomen, without soreness; urinary and intestinal functions healthy.

Prescription. V.S., and cups to the temples largely; blisters to nape and ancles, and free purgation with calomel.

Dec. 3d. Have visited patient daily, and although prompt and energetic treatment has been kept up, no change has occurred until this morning. Pulse now frequent, small, and quick; subsultus tendinum; respiration noisy; eyes lustreless; coma; involuntary dejections; perspiration profuse; very slight emaciation. She died on the 5th without convulsions.

Sectio-cadaveris, eighteen hours after death. Dura mater of a dull leaden color; tough adhesion between it and subjacent tunic, about two inches in length, at the summit edge of the anterior lobes of each hemisphere. Sinus loaded with black fluid blood. Arterial and venous distension extensive in the arachnoid and pia mater. Spots of various sizes of diffuse redness were scattered freely on the arachnoid at the anterior surface of the brain. Cerebrum and cerebellum quite firm; fibrous and granular texture of both densely speckled with red indelible punctuations; capillary engorgement was also every where present. The ventricles presented the same net-

work of vessels, and redness of the meninges generally. The medulla oblongata, pons varolii, corpus callosum, and optic couches were free from discoloration, but so soft as to pit if lightly touched with the finger.

Remarks. By collating the previous history and post-mortem appearances, we are enabled to pronounce this a case of acute, supervening upon chronic, inflammation of the brain and its membranes. Thus, the constant headache, increasing disturbance of the intellectual functions, and mental apathy, together with the softness of certain parts of the brain, indicate chronic action, while intensely acute disease is manifested in the punctuated vascular and turgid condition of the brain and its envelops.

December 30th, 1848.

ART. V.—*Sudden Development of Anomalous Tumors.* By JOHN A. COTTON, M.D., of Greenwood, Mississippi.

September 14th, 1847, I was requested to see the child of Mr. Henry Darnall, aged about 30 months. At the time of my visit the patient was at play in the yard, and seemed in good health. Upon inquiry, I learned from Mrs. Darnall, that she had that morning discovered a swelling on the child's back that caused her some alarm.

Upon examination, I found on the back of the thorax, to the left of the spine, a tumor of the size and shape of a goose egg divided longitudinally. There was no discoloration of the integuments; no pain on pressure. The circulation was natural; the tongue clean; the alvine evacuations regular and of proper consistency. In fact, all the secretions seemed to be in a healthy condition, and there was no apparent departure from general good health, save the local affection, and that gave no uneasiness to the patient.

The tumor was somewhat resisting, from being pressed upon by the traprezius muscle, and looked very much like those encysted tumors usually denominated wens. My prescription was made more with the view to quiet the apprehensions of the mother than to disperse the tumor, for I really thought the case one requiring no treatment, unless the growth of the tumor should render its removal by the knife necessary.

On the 15th I was again requested to see the child. Another tumor of about half the size of the first and very similar to it had formed immediately below it. It was more superficial than the first, being evidently situated in the subcutaneous cellular tissue; the integuments glided easily over it; it was of a regular oval form, and somewhat moveable. Here was a tumor of the size and nearly the shape of a billiard ball, elevated, of consistent feel, painless, with no mark of inflammation, no general arterial excitement, and, in fact, no perceptible constitutional disturbance, of not more than twelve hours growth.

16th. Was again sent for. The two tumors remained *in statu quo;* but numberless others had formed on almost every part of the body and limbs, varying, in size, from a few lines to an inch, or an inch and a half in diameter. Of these, the most prominent were situated as follows: One on the calf of the left leg; one on the abdomen, to the left of the linea alba, about midway between the pubis and umbilicus; one on the left cheek; one about the center of the forehead; and one on the front of the thorax, to the right of the sternum. All the tumors of any considerable size were situated to the left of the median line, except the two last; but several of the next in size were in the vicinity of the right axilla, and smaller ones were scattered irregularly over the whole body.

After this, there were no more new tumors formed,

but the existing crop remained without alteration until the first of November, when they disappeared almost as suddenly as they had formed.

These, to me, most singular formations, were suffered to live out their existence, no treatment for their dispersion having been resorted to. What were they? To one not more accustomed to the investigation of morbid growths than myself, they had every appearance of encysted steatomatous tumors. It gave no pain to handle them, their form could be easily traced, no adhesions existed between them and the integuments, no discoloration of the surface, no fluctuation, no general constitutional disturbance.

Mr. and Mrs. D. do not know that any case, bearing the slightest analogy to the above, ever happened in either branch of the family. I repeat the inquiry, what are these tumors? Are they to be set down to the chapter of accidents, never to be understood, or may it be that a dormant poison yet lingers in the system of the child to develop itself at some future period in the form of a malignant disease?

March, 1848.

ART. VI.—*Notice of the Galium Tinctorum as a remedy in Chronic Diarrhea.* In a letter to the Editor, by Dr. THOMAS C. OSBORNE, of Erie, Alabama.

Enclosed you will find a specimen of a plant which, in this vicinity and in the neighborhood of Mobile, is creating a considerable sensation among the people on account of its reputed virtues in the cure of chronic diarrhea. The discovery of its curative properties is said to be due to an aged negro near Mobile, who was in the habit of prescribing it to persons afflicted with the disease in question for several years before it began to attain

any notoriety; and its reputation now, I believe, is chiefly due to the successful administration of it in the case of General Desha, one of our Tennessee acquaintances, who, for a long time, wasted under the influence of chronic diarrhea, and who, despairing of a cure by medicine, had gone to Pascagola to try the effects of change of air.

Of course, all this is information for which I cannot vouch, not having seen the General, or any one from his section of country who had ever tried the remedy; but the story is in many mouths and doubtless has some foundation.

There is, however, an interesting case, that of a little girl, a near neighbor of mine, which goes to prove that the plant is possessed of astringent properties. The child had labored under chronic diarrhea since May last, and was not much benefitted by the remedies employed. Finally the galium tinctorum was prescribed; it has not been long since she commenced its use, but her parents already regard the cure complete, and declare that "she fattens a pound every day."

The plant is called here *diarrhea weed*, and is used in the form of a decoction.

Great alarm is excited here by the rapid approach of cholera, of which a good many cases are said to have occurred among the humble part of the population of Mobile, but not of a very malignant character.

Influenza is prevailing in almost every part of South Alabama, some cases of which, in my practice, from neglect have run into pleuritis and pneumonia of quite a violent character. The lancet and opium are my sheet-anchor in its treatment, all cases yielding readily to their use.

January 12th, 1849.

ART. VII.—*Comparative Mortality of Typhoid Fever in Kentucky and Missouri.* In a letter to the Editor, by S. W. SOUTHWORTH, M.D., of Glasgow, Missouri.

Since the great overflow in 1844, we have not had a healthy season in this part of Missouri until the present one. But little disease has prevailed since last winter, when typhoid fever was prevalent. I have been struck by the fact, which I deem worthy of the notice of the medical philosopher, that this fever is so much more fatal in Kentucky than in Missouri. In my practice, which is an extensive one, I have not lost, on an average, more than two cases a year from this fever, while I find that in the neighborhood of my old home, in Woodford county, Ky., some families have lost in the same period ten or twelve members. This shows a striking difference in the malignity of the disease in the two regions. The question is, what leads to the difference? That is reputed a healthy region, while this is eminently miasmatic. That has been long settled and is in a high state of cultivation; this is comparatively a new country, and much of it is still covered by its primeval forests. Can this be the cause of the diversity? Can it be that a miasmatic influence neutralizes, to some extent, the poison of the typhoid disease, or that the condition of the system engendered by it does not allow of as violent febrile action? In nearly all our cases, we find engorgement of the liver or spleen as among the symptoms, indicating the extent to which the malarious influence prevails. What connection there is, or whether any, between this condition of our climate and the comparatively mild character of typhoid fever, I am not prepared to say, but the fact strikes me as interesting, and as such I communicate it to you.

November, 1848.

ART. VIII.—*A Case of Pleuro-Pneumonia of the right Lung; Bronchitis of the left, complicated with Inflammation of the Liver, followed by fatal Pericarditis.—Autopsy.* By DAVID W. YANDELL, M.D., of Louisville, Ky.

Lavinia, a negress, belonging to Mrs. S., æt. 27 years, of strong constitution and robust habit, who, with the exception of one or two attacks of autumnal fever several years ago, and a slight inflammation of the surface of the liver in December last, had enjoyed good health, was seized on the 11th of January, after considerable exposure during the Christmas holidays while laboring under a severe catarrhal affection, with great pain and a sense of constriction in the chest, difficulty of breathing, and the other rational signs of pulmonary inflammation.

On Friday, the 12th, when I first saw the patient, her pulse was 160, hard and incompressible; skin dry and hot; intellectual faculties exceedingly obtuse; bowels constipated; urine high colored and scanty; tongue furred, red at edges and tip; thirst distressing; respiration 60 a minute, painful, laborious, and jerking; cough frequent, deep, and hard, attended by a metallic sort of noise, and followed by the copious expectoration of a viscid, tenacious, ropy mucus, some portions of which were perfectly transparent, others frothy, and others again of a sanguineous hue. She complained of the most distressing pain in the whole right side of the chest, extending to the hypochondrium, and most intense in this region and the lower lobe of the corresponding side, augmented by pressure, coughing, and respiration.

Physical signs.—Percussion revealed dullness extending from the mammæ to the base of the right lung. Resonance natural on the left side.

Auscultation.—Anteriorly, signs of consolidation were distinguished over the superior half of the dullness; absence of the respiratory murmur alone over the inferior half. Posteriorly, the same phenomena were present over nearly the same space, though I thought I could detect crepitation extending an inch, or an inch and a half lower down than on the anterior surface. Both anteriorly and posteriorly, however, the signs of engorgement mingled with sibilant rhonchus were perceptible from the superior margin of the dullness to the summit of the lung. The friction sounds were very evident from the right arm-pit to the superior margin of the liver, heard most distinctly from before backwards, and were most intense along the side of the spinal column.

The only thing noticeable on the left side of the chest was the intense puerility of the respiration.

I employed venesection to the amount of forty ounces, and abstracted ten ounces more by cups. The blood presented a highly inflammatory appearance, and even while flowing from the arm the dyspnea was considerably relieved. I ordered a flaxseed poultice to be placed over the inflamed lung, and prescribed the following:

℞. Hydrarg. chlorid. mitis,
Pulv. ipecac. comp. āā grs. x.
Ant. et potass. tartrat. grs. iv.
M. Divide in chart. viij.

One every hour till bedtime, when the patient was to take mist. camphor, aq. ammon. acet, āā ℥ss., vin. ant., tinct. opii. āā gtt. xx. As a demulcent, diuretic, and refrigerant, I allowed the patient to drink freely of a solution of bitart. potass. in slippery elm water with ice, and also permitted her to use ice *ad libitum*.

13th. The condition of the patient unaltered. She had passed a restless and painful night, coughing almost incessantly, and drinking every few minutes of the cream of tartar water. Her bowels had been moved twice; the dis-

charges were profuse, dark colored and offensive. The kidneys had been well acted upon. The pulse was not less frequent or full; the skin still dry and hot; pain acute and distressing; cough frequent and painful; respiration 50 per minute; intellectual faculties obtuse; countenance dull and stupid. Physical signs the same.—Venesection and cups repeated; patient immediately after placed in a tepid bath, where she remained half an hour, and on coming out expressed herself as feeling greatly relieved of the pain in her side and the difficulty of breathing. I ordered cloths wrung out of tepid water to be constantly applied to the chest, and prescribed the following:

℞. Hydrarg. chlorid. mit. grs. xxiv.
Pulv. scill. ℈ss.
Ant. et potass. tartrat. grs. vj.
Pulv. ipecac. comp. grs. xx.

Ft. pil. xviij. One to be taken every hour. The cream of tartar water and ice to be continued.

14th. Patient slept a little last night; was called up several times to stool, but the discharges were mixed with so large a quantity of urine that their character could not be ascertained. She had been kept very sick by the pills, and had vomited once or twice; respiration 40, less painful and jerking; pulse 142, less full and hard; skin dry and hot; tongue furred in center, red at edges and tip; cough more frequent and a little less painful; tenderness over the chest somewhat diminished; not so in the hypochondrium, where it had increased in intensity and now extended over the stomach into the left hypochondrium.

The physical signs, save the friction sounds which were no longer heard, remained the same. A yellowness of the conjunctiva now became very apparent. I ordered the calomel, squills, tart. antimony, and Dover's powder to be continued in the proportion of the day be-

fore, changing only the form, giving them now in powder instead of pill, with the addition of ℥iv of nitrat. potass. The bath to be repeated; the warm cloths to be constantly applied; sinapisms to be used over the stomach; continue tartar water and ice.

15th. Patient passed a very uncomfortable night, and when I saw her at 9 o'clock, A.M., she complained of suffering almost beyond endurance from the pain in the region of her liver and stomach. Her bowels had not been moved; her kidneys continued secreting very actively; and in every other respect her condition was the same as on the day before. The tartar emetic and calomel powders to be continued, increasing the quantity of the former to eight grains. To relieve the pain and assist diaphoresis I ordered a pill of the following:

℞. Ext. hyoscyam. grs. x.
Pulv. ipecac. grs. v.
Ant. sulphur. præcip. grs. vj.
Syrup q. s.

ut. ft. pil. x. One every hour, watching their effect. The warm cloths and sinapisms to be continued.

The patient having become tired of the tartar water, I prescribed

℞. Succ. limon. recent. ℥iss.
Potass. carbonat., q. s., ad saturand.
Sacc. albi ℥j.
Spts. æther. nitric, ℥j.
Aq. menth. ℥iij. **M.**

A tablespoonful every two hours.

16th. Patient passed a restless night; bowels moved four or five times; dark colored stools; very large quantities of urine; skin dry and burning; thirst very distressing; pulse 130; pain and tenderness over stomach and liver undiminished; over the chest very much so, indeed almost entirely gone, except a deep-seated pain just below the right nipple. Respiration 45, less labo-

rious, less painful, fuller, and performed more by the thorax than previously; sputa unaltered; cough more paroxysmal in its character, less constant, brought on by turning over or rising up in bed. Continued prescription of day before.

17th. Had passed a restless night; four or five dark colored stools; large secretion of urine; pulse 132; skin less hot and dry than day before; less stupid, and more irritable. Physical signs on right side unchanged; on left, the puerile respiration has given place to the sonorous and sibilant rhonchi, mingled with an occasional mucous rhonchus. The pain less over the chest, liver and stomach; still considerable tenderness over two last. Respiration 40, but less laborious.

Without relating further in detail the history of the patient, I will remark that her condition continued materially the same, as was also the treatment, except that the tartar emetic was increased to twelve grains in the twenty-four hours, and that ten grains of quinine were administered in the morning and evening, until Sunday, the 21st, when the febrile reaction considerably abated, the constitutional effects of the mercury became apparent, the bronchitis began to disappear, the signs of consolidation commenced slowly receding, and the inflammation of the liver showed a disposition to subside.

I now resorted to large and repeated blisters over the whole of the right side, diminished the amount of mercury, used larger quantities of the pulv. ipecac. comp., and controlled the activity of the circulation by means of the tartarized antimony and quinine. In the course of the same week, I had the satisfaction of seeing the pneumonia almost entirely resolved except over a limited surface immediately next the spinal column, where it resisted constant counter-irritation and well directed constitutional means for five days longer, when it also dis-

appeared, and I pronounced the patient convalescent. This was on Friday, the 25th, two weeks from the time I first saw the patient. The yellowness of the conjunctiva became less and less vivid until it, along with the principal phenomena of inflammation of the liver, almost entirely subsided, though there still remained a slight degree of tenderness on pressure over the diseased organ.

For four days the patient was comparatively free from pain, eat with some relish small quantities of well boiled rice and mush and milk, and drank toast water. On Friday she had considerable hemorrhage from the nose, and on that night her menses appeared, being a week in advance of the usual period. On Saturday afternoon I found her laboring under even more violent febrile reaction than at any previous time. Her pulse was 160, small, weak, and jerking; her countenance exceedingly anxious; she complained of a great sense of uneasiness in the precordial region, where the most distressing pain is excited by pressure, change of posture, cough, and deep inspiration, radiating to the left shoulder and down the same arm to the fingers' points.

Not to continue longer upon the rational symptoms, and to dismiss the physical signs as summarily, auscultation revealed the exocardial bellows sound, clear, loud, and prolonged; the beats of the heart tumultuous and unequal. I practiced a small bleeding, applied cups over the diseased organ, followed by blisters that were sprinkled with powdered digitalis; used calomel, opium, digitalis, quinine, tartar emetic, and, for a few days, thought the patient was improving; but on Monday she grew very rapidly worse, became delirious, and, after both her inferior and superior extremities had been cold for twelve hours, expired on Tuesday morning.

Autopsy, twenty-four hours after death. Chest.—The right pleura was attached by firm, recent, and very thick

adhesions to the diaphragm, and to the ribs from the seventh to the third, inclusive. The pulmonary tissue of the same side appeared throughout firmer, heavier, more elastic, and of a redder hue than natural—all parts of it were entirely permeable to the air. About the center of the middle lobe there was a patch of the size of a dollar, or larger, which still retained the characters of hepatization; immediately around this the reddish shade of which I have made mention, was more evident than elsewhere. Left lung in every respect healthy. The vessels on the external surface of the heart were turgid with blood. On opening the sac of the pericardium it was found to contain about an ounce or an ounce and a half of yellowish looking serum. Towards the point of the heart it was partially but feebly adherent to this organ. Over the whole extent of its surface it was covered to the depth of from one to two lines and a half, with firm coagulable lymph, which manifested in several different places, besides the point of the heart, a strong disposition to become organized; indeed, there were no less than four or five small bands stretched across from one point to another, drawing the heart and its investment closely in contact, and retaining them in that position with considerable force. The whole of the internal structure of the heart, valves, membrane, etc., were in every respect healthy. The substance of the organ appeared somewhat though not palpably softened. The liver was considerably enlarged, engorged throughout, of a deep jaundiced hue, and its external surface, for about two lines into the substance of the organ, was hardened, offering some resistance to the knife. The left lobe was greatly indurated, grating under the knife. The other organs of the body were healthy.

Remarks.—During the progress of this case, I had an opportunity of exhibiting it to a number of medical students belonging to my class. The subject of my lec-

tures was one which the case was well fitted to illustrate, and the following remarks, made before my class on its diagnosis, will not, perhaps, be deemed inappropriate in the present connection. I demonstrated to them the lesions of the heart, to which the fatal result was mainly attributable.

You will remember, I remarked, that, when speaking of pneumonia of the second degree, or hepatization, I told you it was often a very difficult matter to determine between it and inflammation of the liver accompanied by enlargement. The history of the case is very often of great service to us, and was so in the present instance. The girl had suffered from an attack of inflammation of the surface of the liver about the middle of December, and though she had been able to resume her work as house-servant, she continued to complain of a sense of uneasiness in her right side, and lost her appetite and spirits. From the color of the skin of the African, the jaundiced hue of the surface, which is observable in the white when laboring under disease of the liver, cannot be distinguished; but, fortunately, the color of the conjunctiva in health and its discoloration when the escape of bile through the proper channels is impeded, are the same in both races.

Pain in the right shoulder, though by no means always present in inflammation of the liver, is not the less valuable when it does exist.[1] Pain and tenderness over the diseased organ, augmented by pressure, change of posture, coughing, and deep breathing; stupor, somnolency, and decubitus on the diseased side, are some of the more prominent of the symptoms of hepatitis. The symptom which is next in importance to the pain and tenderness is the tumified condition of the organ. A practical hint that may be of service to you is, that whenever you wish to examine the liver or spleen it is very important to have the intestines empty and the belly flaccid;

for when they are distended by either air or fecal matter, it is next to impossible to obtain a correct idea of the volume of these organs. When the bowels are empty and the belly flaccid, you will, in most cases, be able to detect hepatic enlargement by the fullness in the right hypochondriac and epigastric regions, and the edge of the liver protruding more or less below the costal cartilages. In some instances, the ribs appear bulged out; but (and I wish you to bear this in mind, for it will be of great assistance to you in the diagnosis between hepatic and pulmonary disease) the intercostal spaces preserve their relative positions with respect to them. In hydrothorax, on the other hand, the intercostal spaces are obliterated, and if the effusion be very great they are even bulged out.

You ask me, by what means I was able to determine, in the case of Lavinia, where the dullness, dependent on the liver, ended superiorly, and that produced by hepatization commenced? Or, in other words, how was I enabled to tell how much of the thoracic dullness was produced by hepatitis, and how much by pneumonitis? By percussion alone I could not tell; it was inadequate. But by applying my ear to the chest while the patient was lying down, and listening attentively for the inferior limits of the signs of pneumonia, and then carefully bearing them in mind, or tracing a line upon the chest at this point, the patient was desired to sit up and take a deep inspiration, when the pneumonic disease was found to reach quite a perceptible distance farther down than before; in other words, by the expansion of the lung by a full inspiration, the liver was in some degree displaced, driven down; and where, before, I heard no sound at all, I now discovered a very loud blowing noise, which is one of the signs of consolidation of the lung.

The physical signs of pneumonia vary according to the period of the disease. The first period is, accord-

ing to Stokes, characterized by rudeness of the respiration; the second, or that of engorgement, by the crepitant rhonchus; the third, or that of hepatization, by the bronchial respiration and bronchophony; dullness on percussion is also observed at this period; the fourth, or that of softening, by the mucous rhonchus. The inflammation in the present instance attained only the third degree. The progress of the disease was this; first, there was dryness of the lining membrane of the air cells of the lungs, which was revealed by the rudeness of the respiration. The inflammation increased; engorgement of the cells ensued, and crepitation was the consequence. The inflammation continued to advance, solidification was effected, and the cells, closed up, were no longer permeable to the air, which, being confined to the bronchial tubes, made its way through them with a loud rushing noise that has been aptly styled the tubal respiration. The corresponding alteration on the part of the voice is called, with equal expressiveness, bronchophony.

As the inflammation subsided, the signs of solidification gave place to those of engorgement; these, in their turn, yielded to that of simple congestion; and this grew less and less distinct until finally the normal vesicular murmur alone could be heard. These *recurrent* phenomena only obtain when the inflammation has stopped short of the fourth stage, or that of softening.

Not to detain you longer, I will conclude by adding that the pleurisy was revealed to us by the friction sound, of which there are two varieties—the soft or *grazing*, and hard or *scraping*, friction sounds. And, finally, the inflammation of the bronchi was evinced by the sonorous, sibilant, and mucous rhonchi.

Feb. 21, 1849.

REVIEWS.

ART. IX.—*A Theoretical and Practical Treatise on Human Parturition.* By H. MILLER, M.D., Professor of Obstetrics and Diseases of Women and Children, in the Medical Department of the University of Louisville. Louisville: John V. Cowling & Geo. C. Davies. Cincinnati: H. W. Derby & Co. New York: A. S. Barnes & Co. 1849. 8vo. pp. 463.

This work is no compilation. The author has aimed at something more than giving what others have taught and practiced in the art of obstetrics. His large experience has furnished him with the materials for forming his own independent opinions on all the unsettled questions relating to the art. These he has expressed, not dogmatically, but like one who had matured them carefully, and was thoroughly persuaded of their truth. Where the authors differ in reference to doctrine or practice, he has always his own decided convictions, for which it will be found that he has brought foward an array of arguments not easily resisted. Where, in his practice, he has not found things as others describe them, he is candid to acknowledge it. Where he has met with anything in writers which his experience does not approve, he has condemned it. His work is the result of long practice, and much reading and study. It is a judicious work. It may be criticised; on several points it is opposed to the highest authorities in the profession; but we are very greatly mistaken in our estimate of its character if any

one, after a careful perusal, can lay it down without impressions highly favorable to the sound, discriminating judgment of the author. In his preface, he says: "To give a full, correct, and lucid description of the mechanism of labor, is a leading object which the author had in view, in writing this book. In the prosecution of it, he has not hesitated to examine rigorously and criticise freely the statements and opinions of others." His work he submits to the same scrutiny.

Prof. Miller believes, that, although many valuable works on midwifery have appeared in this country, one was still wanting on the subject—"a native authority to educe order out of confusion, and set up a national standard, under which all our practitioners may arrange themselves, and be cemented by a common bond of union." In regard to the fetal presentations and positions, our technology, as he remarks, has been thrown into confusion by the multitude of writers, and obstetricians find it impossible to communicate with each other in intelligible terms. His aim in the work which he now submits to his countrymen, is to carry them back to a standard upon which all may agree—"to review the whole subject of presentations and positions, with the light which his own experience and that of others has shed upon it, since the time of Baudelocque, and establish for them a classification and nomenclature which, it seems to him, all may adopt." He recommends the classification of M. Dugès; the nomenclature is his own. In the conclusion of his preface he avows that the principles upon which he has practiced midwifery are those of Hamilton and Burns, who regarded labor as "an exhausting struggle," and the office of the obstetrician as something more than an idle contemplation of the process. With this avowal, his readers will not expect to find him favorable to the expectant practice so fashionable since Denman's day. At the same time he is far from being obnoxious to the

charge of a "meddlesome midwifery." He has, as appears to us, happily avoided the two extremes, indicating under what circumstances nature may be left to herself, and when, in her weakness, she demands the judicious ministry of the accoucheur.

Prof. Miller devotes the first four chapters of his treatise to the "rudiments of parturition," under which he embraces the *obstetric properties of the pelvis*, the *obstetric aptitudes of the fetus*, *the appurtenances of the fetus*, and the consideration of the *uterus as an organ of expulsion*. It is expected of the student that he shall make himself familiar with these "rudiments," and yet he will find no little difficulty in determining what they are amid the conflicting statements of authors on the subject. In regard to the obstetric properties of the pelvis, the exposition of M. Dugès, though the briefest of any writer, in Dr. M.'s opinion, is the best, and accordingly he adopts it.

In the second chapter, Dr. Miller examines at some length the question why the head of the fetus is so generally the presenting part. He shows the fallacy of the common belief, that it is owing to the higher specific gravity of the head. He refers to the experiments of M. Dubois, in which it was shown that when a fetus was plunged into water the head did not descend faster than the body. He also quotes the observation of this writer, that presentations of the head are proportionably less frequent in the earlier months of gestation, when the relative size of the cephalic extremity is greater. Finally, he cites the well-known fact, that in quadrupeds the head of the fetus presents with as much constancy as in the human species, when, on the physical hypothesis, it ought to be the furthest removed from the os uteri. The conclusion is, that the position of the fetus in utero depends, not upon physical, but upon vital laws; and there has been no better explanation proposed than that of

Dubois, that it is determined by the instinctive movements of the child made in obedience to an internal sensation—the principle, so strong in our nature, thus early exhibited, of seeking to improve our situation.

Of the appurtenances of the fetus the placenta is the one which has the most important office to perform. It is the organ of respiration and of nutrition. Through it the young being, during intra-uterine life, derives all its nourishment. Physiologists have perplexed themselves needlessly, as we think, concerning the change wrought by it in the blood. They have expected to find a change of color similar to that produced in the lungs by respiration, and have expressed surprise when they could detect scarcely a shade of difference in the color of the fluid circulating in the vein and the arteries of the cord. When we consider that the arterial hue is imparted to the blood by contact with the oxygen of the atmosphere, it is palpable that we ought not to look for it in the fluid leaving the placenta. For all the purposes of embryotic life, the blood of the placenta is sufficiently oxygenized. It is only after the fetus becomes independent and rises in the scale of being, that aëration of its blood becomes necessary.

The anatomy of the uterus is the subject of the fourth chapter, and it is shown that this differs materially in the different parts of the organ. Dr. M. adopts the doctrine that the body and neck are destined to perform different and antagonistic parts in the process of parturition. Before this commences they have different offices to perform. The cervix has no agency in the menstrual function, which belongs exclusively to the body. The body is for the reception, growth and accommodation of the ovum; the office of the cervix is to retain the ovum until the proper time arrives for its expulsion. The neck contributes nothing to the cavity of the impregnated uterus,

the dilated body furnishing all the requisite space. The neck, therefore, "is the *sphincter* of the uterus."

"But the uterus, notwithstanding its natural division into body and neck, and its complete equipment of muscular fibers, would fail to fulfil its office as an organ of expulsion, were it not suitably endowed with *nerves*, to put it in relation with other organs, and enable it to receive and respond to impressions made upon it. It is accordingly supplied with nerves in great abundance, and from the two great centers of the nervous system, namely, from the great sympathetic and the cerebro-spinal axis."

The researches of Dr. Lee, to whom we are indebted for much of our knowledge respecting this interesting branch of anatomy, have fully established the fact, that the nerves of the uterus are enlarged by pregnancy.

We come now to the consideration of the efficient cause of *Labor*. What is it? We give our author's view of it:

"Labor, then, according to our view of it, is a contest between the body and the neck of the uterus,—the former aiming to expel the fetus, and the latter to retain it. This is no novel doctrine; it was distinctly taught by the celebrated Levret, who maintained that, as the neck of the uterus is the antagonist of the body, during pregnancy, and serves to hinder the product of conception from being expelled, so the body is the antagonist of the neck, during labor, else the fetus could never escape; and if the neck prove too strong for the body, one of them must necessarily be ruptured."

The uterus becomes hypertrophied during pregnancy; its contents are expelled by its tonic contraction, together with the accessory action of the diaphragm and the abdominal muscles.

In the next chapter, the determinative cause of labor is considered. This, in the view of Prof. Miller, is "*irritation of the cervix, and especially of the os uteri, arising*

from the contact of the ovum with it," a theory which he adopts from Dr. John Power. Like the bladder and the rectum, the uterus is stimulated to contraction by the pressure of its contents upon its sphincter. The arguments in favor of this doctrine are as follows:

"*First; The peculiar manner in which the uterine neck is unfolded during pregnancy.* It has been shown, in a previous chapter, that the neck of the uterus does not participate in the changes going on in the body, having for their object amplification of the cavity, but remains quiescent for a considerable time, and then undergoes changes peculiar to itself; that its unfolding, so as to admit the ovum into contact with it, is deferred to a very late period of pregnancy, until, in fact, a short time before labor sets in.

"*Secondly; The rectum and bladder being excited to expel their contents by irritation of their orifices, affords strong ground of presumption that the uterus is excited to action on the same principle.*"

But, continues Prof. M.,

"We need not dwell longer on presumptive evidence, when demonstrative proof of the truth of our doctrine is within reach. Here it is: *The uterus can be excited to expulsive contractions, especially in the latter months of pregnancy, by artificial irritation of its orifice.* This artificial irritation is established by the introduction of a finger within the orifice, and pressing upon its circle to stretch or dilate it. The knowledge of this fact led M. Puzos, a century ago, to propose his memorable innovation upon the previously-established practice in cases of flooding, occurring in the latter months of pregnancy."

We shall not follow the author through the lucid and philosophical account which he gives of the phenomena of labor, in his seventh chapter, but proceed to notice his treatment of its first stage laid down in the chapter succeeding.

There have been two schools, as is known, who have long divided the profession in regard to the management of the first stage of labor—the English and the Scotch. At the head of one stands Denman; Hamilton and Burns are the most noted names in the other. Denman held, that whether a short or a long time be required for the dilatation of the os uteri, the duty of the practitioner is not to interfere in the process. Hamilton held, that the termination of the first stage of labor ought to be secured within twelve or fourteen hours from its commencement; and Burns was disposed to abridge the time to ten, or, at most, twelve hours. Dr. Miller belongs to the latter school, and the reasons which he assigns for interposing in cases where the os uteri is slow to dilate, are such, we believe, as will carry conviction to most of his readers.

Among the causes of delay in the first stage of labor, are *obliquity of the uterus* and *inefficient action* of that viscus. The first may be generally remedied "by regulating the posture of the patient, enjoining her to lie on the side opposite that toward which the fundus inclines."

"Should strict attention to posture, continued for a reasonable time, fail to correct the obliquity, and the labor in the meanwhile make but tardy progress, it is proper *to hook the os uteri by inserting the extremity of the finger within its orifice*, and draw it toward the center of the pelvis, in the intervals of the pains. When a pain comes on, its tendency to relapse to its former position is to be resisted, with as much force as can be safely employed. If this tendency is too powerful to be resisted, the finger must yield to it; but, as soon as the pain ceases, bring back the os uteri to the center, and again endeavor to maintain it there during the next pain. By cautiously and gently, but perseveringly, acting thus, the os uteri will, after a succession of centripetal and centrifugal movements, be restored to its proper place, and the parturient forces having been brought to bear upon it, its dilatation will be effected as speedily as in ordinary cases."

For the second obstacle, if there be no morbid state of the system to account for the inefficient action, as fever, or confined bowels, Prof. Miller's remedy is *irritation of the uterine orifice by means of the finger.* In recommending this procedure, he is aware that he "stems the strongest current of authority that runs through obstetrics," but, sustained by the high sanction of Burns and Power, and by his own frequent experience, he insists, not only upon its perfect safety, but its prompt efficacy in bringing on uterine contractions. He gives the necessary directions for it in the following passage:

"In the first place the manner of doing this must be explained, in order to guard against any misapprehension or abuse of it. It is rarely necessary to employ more than the index finger, the extremity of which is to be introduced within the orifice, in the absence of pain, with its pulp or feeling surface turned toward the anterior lip of the os uteri. The patient is placed on her back, which is certainly the most convenient position for the manipulation. When a pain comes on, or after the lapse of the usual interval, whether there be pain or not, and for the purpose of exciting one, pressure is to be made with the finger, moved slowly around so as to bear successively on every part of the anterior semicircumference of the orifice. Having described a half circle in one direction, for example, toward the right side of the patient, the finger is to be moved in the same manner in the opposite direction, and these movements are to be continued during the pain, or, if there be no pain, for a minute or so. It is then to be withdrawn from the orifice, but retained in the vagina, or if kept within the orifice, it must rest from its work for a few minutes. When pain recurs, or should recur, the finger is to be used in the same manner, and so on, until the uterine contractions become stronger, and act with more efficiency upon the orifice, when it is to be withdrawn from the vagina. The invigorated contractions may finish the dilatation of the orifice without any further assistance. Should they flag, however, or progress slowly, the finger may be reintroduced, from time to time, to freshen them. If the membranes are ruptur-

ed, and the os uteri contracts much during a pain, there may not be room for the finger between it and the presenting part of the child: in this case the finger must be used, as directed, in the interval of pain, and when contraction comes on, it must be withdrawn and made to press on the verge of the orifice. To produce the requisite orificial irritation, the finger must press, with different degrees of force, in different cases; but, in all cases, the pressure should be gentle at first and gradually increased, and it is never allowable to use such force as would be required, literally, to stretch the os uteri. The mere contact of the finger is not sufficient to excite the os uteri; it is, therefore, necessary to make pressure with it, but it must be remembered that this pressure is intended to *stimulate*, not to *force open*, and that it acts upon a *vital*, not upon a *mechanical*, principle.

"Speaking from abundant experience, I can truly say that it is equally surprising and gratifying to observe the prompt effects of this manipulation, in many cases of the kind under consideration. Not unfrequently, a few movements of the finger are sufficient to impart such energy and aim to the uterine contractions, that the waters begin to gather, as the phrase is, and cause the membranes to protrude."

The subject is continued in the next chapter. A third cause which delays labor in the first stage, is *impeded action of the uterus;* and a fourth cause, is *morbidly resisted action*, or, as it is usually termed, *rigidity of the os uteri.* In cases of this sort, as in those just noticed, Prof. M. holds that it is the duty of the practitioner to act. Those of the cast of Job's physicians, he thinks, "sadly abuse the confidence of their patients"; and their patients, no doubt, if they understood the matter, would think with him. Bleeding, opium in the form of an enema, tartar emetic, are to be tried, with tepid baths, and the topical application of extract of belladonna and stramonium. And, finally,

"Should all the means above recommended fail, or but partially succeed, in overcoming the rigidity of the os

uteri, and the cervix descend in advance of the head of the child, it is necessary *to raise and support the os uteri.* As this is a measure of considerable importance, I shall endeavor to explain how it is to be practiced. The index finger is to be applied just underneath the anterior lip of the os uteri, and with its edge or palmar surface pressure is to be made, in the interval of the pains, so as to push up the os uteri as high as possible, or the extremities of two *or three of the fingers may be used* in the same way. When a pain comes on, the tendency to descent is to be resisted, unless this be so strong as to require more force than it would be prudent to employ: in that case, the finger or fingers must gradually relax its counter pressure and allow the descent to take place. But as soon as the pain goes off, the os uteri is to be pushed up again, and its descent is again to be resisted during the next pain. In this manner, acting mith gentleness and caution, but, at the same time, with firmness and perseverance, the os uteri must be supported until it is sufficiently dilated to allow the head to execute its rotatory movements, and emerge from under the symphisis pubis.

"The principle upon which this maneuver acts does not appear to have been well understood, even by those who have practiced it. The support given to the os uteri prevents it from prolapsing, to be *backed*, if the expression will be allowed, by the floor of the pelvis, and places it in a position that will permit a portion of the head to become insinuated within it during a pain. The finger is not used to stretch the os uteri, as many writers direct, but to hold it up that it may be dilated by the head, which can then be pushed, by the uterine contractions, lower than the level at which the os uteri is held. The head dilates the os uteri far better than the finger could, because it acts upon the whole extent of the cervix, whereas the finger could act only on the circle of the os uteri."

Describing the common phenomena of the second stage of labor, Dr. M. remarks at some length, towards the close of the chapter, upon the changes of the uterine circulation, and shows that if this stage be protracted by any obstacle requiring unusually powerful efforts of the

uterus to overcome it, the death of the fetus is apt to occur. At every labor-pain of great intensity an interruption of the circulation must take place; the fetal respiration is thereby suspended, and if this continue beyond a certain period, the fetus must be born asphyxiated. We shall see how our author brings these principles to bear upon the use of ergot further on.

The treatment of this stage of labor forms the subject of the eleventh chapter. Uterine hemorrhage is the chief danger attending this stage, and a frequent cause of it is the too rapid progress of the labor—"the expulsion of the child immediately following the rupture of the membranes." The tonic contraction has not time to effect the proper change in the volume of the uterus, and if the placenta "should be detached, in whole or in part, by the muscular contraction that expelled the fetus," hemorrhage must ensue. The remedy is to rupture the membranes in time; viz: "*when, the dilatation of the os uteri being completed, the pains become expulsive, or even in the absence of expulsive pains and with a view to excite them.*" This practice is generally condemned by obstetrical writers; but, with our author, we believe that it is the true practice. The membranes have performed their office when they have dilated the os uteri, and then, if they do not give way themselves, they ought to be ruptured.

This stage may be protracted by "inefficient" or by "impotent action of the uterus." For the first, bloodletting is sometimes resorted to with advantage, and sometimes castor oil, or a stimulating enema; but the great remedy is *ergot*, the conditions favorable to the use of which are laid down in all the authors. The remedy, Dr. Miller thinks, is far from being a safe one. He remarks,

"From the exposition that has been made of the changes induced in the uterine circulation, by the partu-

rient contractions, it is evident that if these contractions were not alternated with intervals of repose, the fetus would be inevitably destroyed, in every case of parturition, before its expulsion could possibly be effected. Such unrespited contractions of the uterus, as we have supposed, are, it is very well known, produced by ergot; when it is exhibited and takes effect fully, the uterus is urged to one long and unceasing effort until its contents are evacuated. A radical change is, therefore, induced in the mode of uterine contraction, which is tantamount to wresting the process of parturition from the hands of nature. No respite from her sufferings is allowed the mother,—no breathing time for the fetus. What wonder, then, if the former is more exhausted by the labor, and the latter ushered into the world completely asphyxiated,—its countenance swollen and livid, and its vital organs engorged, or oppressed with extravasations of blood!"

This violent and unintermitted contraction may, moreover, produce fatal compression of the child's brain, as our author adduces instances from other writers to show. He continues, on the same subject—

"But the destructive tendency of ergot, as already intimated, is not limited to the child. When prematurely or incautiously administered, it may cause rupture of the uterus, by goading it to exert a degree of force incompatible with its integrity, but yet insufficient to overcome the obstacles that may oppose it. Especially is this true in cases of disproportion between the size of the child and that of the pelvis, and when there is unusual resistance of the os uteri and perineum."

In proof of this Dr. Miller cites the following cases. He says,

"That rupture of the uterus has been often caused by the exhibition of ergot, I cannot doubt, after a careful examination of cases that have been reported in the medical journals. One journal published in this country, in

a single month, (April, 1841), not to refer to others, contains two cases, in which fatal rupture of the uterus was owing to the use of ergot, though the true cause of the accident does not appear to have been suspected by the reporters. It may be useful to give an abstract of these cases,—premising that the title of the journal, referred to, as well as the names of the parties concerned, are suppressed, lest offense should be given, and I be accused of a spirit of ill-natured personal criticism, which does not at all actuate me.

"The first occurred in the practice of ——, at the time one of the editors of the journal. The patient, who had given birth to a dead child two years previously, was taken in labor about four o'clock, P. M., Friday, 16th March; seven hours afterward the os uteri was well dilated, the head presenting in the first position; the protrusion of the scalp indicated its compression on account of the small size of the pelvis, and but slow progress was made for the next five hours; the head became jammed in the pelvis, and was stationary for the next eight hours, when twenty drops of the wine of ergot were administered 'in the hope that more efficient contractions of the uterus might perhaps mold the head of the child to the cavity in which it was impacted:' the ergot having no effect, in an hour and a half, an attempt was made to deliver with the forceps, which failed on account of the pelvis being so absolutely filled up with the head, that 'it was not possible to introduce the smallest-sized catheter into the bladder:' the patient was next bled and *got a scruple of powdered ergot;* this was at four o'clock, and at six, *the pains being strong*, forty drops of laudanum were given, shortly after which *the alternate contractions of the uterus entirely ceased*, and she was attacked with *pain in the epigastric region and vomiting;* an attempt to deliver with the forceps was again made, with no better success than at first, when it was determined to deliver by embryotomy, which was accomplished with great difficulty, and 'literally with main force.' It is not necessary to pursue the subsequent history of the case; suffice it to say that the patient died, and a post-mortem examination revealed the existence of rupture of the uterus, with extravasation of blood into the abdominal cavity, and intense peritoneal inflammation."

"The second case, entitled 'Utero-Vaginal Rupture,' is communicated by ——. The patient was in labor with her third child, and had complained of slight pains during the whole of the day before the doctor was called: the os uteri was found to be but partially dilated, although it was very easily dilatable; he ruptured the membranes, which failing to improve the labor, ten grains of ergot were given with the effect of increasing the pains, but these soon beginning to languish, the dose was repeated, shortly after which she had a *few very severe pains.* The action of the uterus then gradually declined, and the os uteri became less dilatable, for which it was judged proper to bleed her, but *she did not bear the abstraction of blood well*, the loss of eight ounces rendering her pulse 'weak and frequent'; four hours after the bleeding the os uteri was more dilated, but the pains were still weak and inefficient; an anodyne was given, and she was left for the night; at nine o'clock next morning it was reported that she had passed *a very restless night*, and had complained much of pains, but few of which the patient thought efficient: on examination it was found that the os uteri was fully dilated, the breech presenting, and advanced three-fourths of an inch to an inch lower than at last examination: ineffectual attempts were made with the hand to bring down the feet, and ergot was again administered, but did not produce the least effect. It was now determined to deliver with instruments; the feet were with difficulty brought down with the blunt hook; the body was soon expelled and the arms brought down, but when the head came into the pelvis the patient was so much exhausted, that it was deemed prudent to defer the extrication until the patient was revived by stimulants; the head was then delivered with the crotchet, but not without extreme difficulty, and there was not the least subsidence of the abdominal tumor until the delivery was nearly completed. It is needless to follow the further details of the case: the patient died the next day after delivery, and the autopsy disclosed metroperitonitis, effusion into the abdominal cavity, with coagula of blood, and transverse rupture of the left side of the neck of the womb, extending into the vagina."

Certainly, we think with Dr. Miller, there is no room to doubt, that "goading the uterus with ergot" was the

cause of the fatal issue in these cases. It was, assuredly, wholly inadmissible under the circumstances; but, as Dr. M. remarks, it is not always an easy matter to decide with confidence that all the conditions exist which justify the exhibition of ergot, and it is therefore fortunate that the obstetrician has other resources.

"The manipulations, which I have recommended in the first stage, may also be usefully employed in the second, with marked effect. The anterior margin of the os uteri, although it be sufficiently dilated to allow the fetus to pass, may be commonly felt behind the pubes, and the finger is to be insinuated between it and the presenting part of the child, in the absence of pain, and press it upward, performing, at the same time, semicircular movements, as already explained. When a pain comes on, the finger is still to retain its place and continue its operations, unless the cervix contract with such force as to compel it to give place, in which case it is to be withdrawn, but be reintroduced when the pain subsides, and act as before."

When the head has descended so low that the os uteri cannot be felt, still by pressure with the finger on the posterior wall of the vagina the expulsive contractions of the uterus, etc., may be aroused. In recommending this procedure Dr. M. has before his mind the ridicule of that large party of accoucheurs who discredit the value of all such manipulations; but he is unmoved by it, convinced as he is, by much practice, of its utility.

Impotent and *inefficient* action of the uterus are not the same thing. In the former, the force is inadequately exerted because the ability to act is destroyed; in the latter, it is not exerted though it exists in full vigor. In cases of impotent action, it is desirable to ascertain whether the child be alive or not, and this is to be done by auscultation.

"On applying the ear to the abdomen of a woman in advanced pregnancy, if the fetus be alive, the action of the heart can be discovered by the sounds emitted from it. These sounds, compared by Kergaradec to the ticking of a watch, may be recognized as cardiac by their resemblance to those of the adult heart, with which they cannot be confounded, on account of their much greater frequency. The action of the fetal heart is much more easily discoverable in the second stage of labor, because the liquor amnii being discharged in whole or in part, it is brought nearer to the walls of the mother's abdomen. The examination being made in the interval of the pains, a practiced ear will not unfrequently hear the cardiac sounds, the instant it comes in contact with the abdomen.

"If it be discovered that its heart is in action, the evidence of the life of the child is, of course, complete. But if we fail to make this discovery, it has been questioned whether the evidence of its death is quite as satisfactory. The proof is, it is true, of a negative character, and it is certainly possible that the child may be alive; and yet, owing to its peculiar situation in the uterus, we may not succeed in detecting the action of its heart. I cannot but believe, however, that if a careful examination of every region of the abdomen, occupied by the gravid uterus, discloses no trace of the heart's action, (supposing, of course, that the examiner has the requisite experience and tact), the fetus has lost its vitality, or at least the probability of this is too great to justify us in adopting any method of delivery, based on a contrary supposition. The fetus is, therefore, dead to all *practical* intents and purposes. Under certain circumstances, the cessation of the cardiac sounds is conclusive proof of the child's death as ocular examination could afford; I mean where, in the early part of labor, we can distinctly hear these sounds, but discover that they grow less and less audible, as labor progresses, until they become entirely extinct. My own practice is to seek an early opportunity to apply my ear to the abdomen, in every case of labor; and then, if the labor should be protracted, I have a sure index of the child's condition, which should always be taken into estimation, when we are deliberating as to what measures shall be adopted."

In the treatment of uterine impotency, the remedies so useful in inefficient action are of little avail. Bloodletting, ergot, and the manipulations with the finger cannot be relied upon in this condition of the uterus.—What then is to be done? In the end, our resource is generally instrumental delivery, the period of resorting to which must be left to the judgment of the practitioner.

We have said that in respect to *presentations*, Prof. Miller adopts the classification of M. Dugès, exhibited in the following synopsis, in which is also shown the frequency of the different presentations in 37,126 cases of labor:

Genera.		*Species.*		*Frequency.*
I. Vertex;	35,375	1st.	Back anterior and left;	27,443
		2d	" anterior and right;	7,512
		3d	" posterior and right;	276
		4th	" posterior and left;	144
II. Pelvis;	1,390	1st	" left;	854
		2d	" right;	494
		3d	" anterior;	14
		4th	" posterior;	26
III. Face;	175	1st	" left;	99
		2d	" right;	76
IV. Right shoulder;	103	1st	" anterior;	57
		2d	" posterior;	46
V. Left shoulder;	83	1st	" anterior;	52
		2d	" posterior;	31
5		14		37,126

The nomenclature proposed by Prof. M. strikes us as preferable to that of M. Dugès. A nomenclature ought to be agreed upon by writers and teachers in America, and unless one can be devised less exceptionable than that which he here proposes, we hope it will be adopted.

Under the head of the phenomena of the second stage of labor, the subject of the fourteenth chapter of his

work, Dr. M. presents a most lucid and satisfactory description of all the steps of the process. Having furnished what he considers a correct description of it, in all the vertex positions, he proceeds to discuss the etiology of the rotation of the head, which has given rise to a greater diversity of views than almost any other phenomenon in the process. He concludes the discussion with his own view of the matter, and remarks:

"I feel bound to declare my own unshaken faith in the reality of such a rotation as I have ascribed to the head, in the account already given of the mechanism of labor. This faith does not repose upon authority only, but, as I flatter myself, upon careful and repeated observation. Like Nægelé, I have in numerous instances watched the different evolutions of labor, with my finger, for hours, now on a fontanel, and anon on the commissures, and if I have not almost uniformly verified the *complete* rotation of the head, I have as yet learned nothing in midwifery. When, in a first position of the vertex, the posterior fontanel is, at a certain stage of labor, plainly felt behind the left obturator foramen, while the lambdoidal commissure is to the left of the symphysis pubis, and the sagittal crosses the vagina obliquely from above downward and from left to right; but in the further progress of labor, the lambdoidal is brought completely forward, so that its branches cross the rami of the pubes equidistantly from the symphysis, and the sagittal runs vertically, parallel with the genital fissure, while the posterior fontanel is to the left on the same line,—when, I say, all this is plainly and nearly invariably felt, the conviction must be riveted upon the mind of the observer, that *the head does verily completely rotate.* Such is my experience—or, if it prove unreal, my dream, for more than twenty years."

In vertex presentations the accoucheur has generally little to do; "nature must be allowed to do her work in her own good way." There are, however, not a few cases in which the passage of the head and shoulders may be facilitated by the proper assistance.

"Let us inquire, then, what may be safely done to favor the release of the head, when it is pressing on the perineum, but its exit is unduly delayed. The delay may arise from the resistance of the soft parts at the outlet, or from the inadequacy of the parturient powers to cause the head to execute the movement, by virtue of which it clears the vulva. The execution of this movement (extension), it has been shown, requires a degree of uterine force, of which they alone have any just conception, who have carefully studied the mechanism of labor. In either case, firm and properly directed pressure on the perineum will avail much in promoting the birth of the head, by aiding the movement in question. The pressure should be, of course, from the extremity of the sacrum toward the symphysis pubis, and so managed as not only to push the forehead of the child in that direction, during a pain, but as much as possible in the intervals of the pains, so as to retain whatever advantage is gained. The patient lying on the back, both hands, with the extremities of the fingers directed toward the sacrum, may be employed in raising the head, as it were, toward the pubes. By acting thus, I have often succeeded in having the head expelled by a few pains, notwithstanding it had made no advance for hours previously, and there appeared to be no prospect of its expulsion by the unaided offorts of nature. Of Baudelocque's maneuver, slipping a finger or two under the jaw, much less of Mauriceau's, laying hold of the head, for the purpose of making traction upon it, I have no experience."

Directions are also given for the extraction of the shoulders, for the management of the umbilical cord when it is found encircling the neck of the child, and for the far more serious impediment to delivery, the permanent contraction of the cervix uteri about the child's neck. For the latter,

"The treatment consists in the dilatation of the contracted portion of the uterus by the fingers, insinuated between it and the back of the child. This can be accomplished only by first elevating the head above the

superior strait, for there is not room in the excavation to receive the hand between it and the pelvic walls. When, therefore, the diagnosis is established, in the manner already explained, we should proceed at once, without withdrawing the hand, to remedy the difficulty. The stricture being dilated, the hand should be suddenly withdrawn, upon the access of a pain, that the shoulders may take its place, and prevent a recurrence of the accident."

Capital blunders have been committed by experienced practitioners in such circumstances, and it therefore behooves the young accoucheur to be cautious in his diagnosis. He is exposed to the risk of mistaking the case for one of impotent action of the uterus, and of resorting, improperly, to the use of instruments. Smellie reports a case in which he fell into this error.

Chapter XVI is devoted to "instrumental delivery in vertex presentation," and the various operations pertaining thereto are described with clearness and precision. The subject is a grave one, and our author takes occasion to show that grave errors have been committed by eminent writers who have described, as well as by practitioners who have attempted to execute, the several maneuvers in instrumental delivery. If the directions given in this chapter are heeded, we shall cease to hear of that "barbarous midwifery" of which "fistulous communications between the bladder or rectum and vagina" are the legitimate fruits.

The next chapters treat of "nates presentation," in which, as in cases of vertex presentation, nature is generally to be left to accomplish the process unaided. "*Natural delivery*," Dr. M. says with emphasis, "in *all cases*, is *preferable to artificial*, but in none more than in nates presentation." It is not, in every case and under all circumstances, an easy matter to make out the diagnosis of this presentation. "The anus," it has been

said, "is so characteristic, that it ought to be sufficient to prevent mistakes." To which our author replies,

"Aye, so it ought, if it were always found a closed and puckered orifice; but if the child be dead, and a curious examiner have been poking at it before we are called, it may be gaping and tumid, and feel like the mouth, while the buttocks, to the touch alone, are not unlike the cheeks. No wonder then if it should be mistaken for a face presentation, one instance of which is within the compass of my own knowledge,—in sooth, *magna pars fui.*"

In "face presentations" turning has been proposed by high authority. Dr. M., very justly as we think, condemns the practice, which, "with the single exception of the Cæsarian section, is the most artificial of all the modes of delivery." We are neither "to redress the head, nor turn, nor use the forceps, merely because the face presents;" no special treatment is demanded, but we should exercise "all reasonable confidence in the ability of nature to accomplish what she proposes."

We come next to a presentation of a very different character, that of the shoulder. But even in this apparently hopeless case, the expulsion of the fetus has sometimes been effected by the unassisted efforts of nature, an instance of which is related by Dr. Miller. He says,

"February 27, 1846, I was requested by Dr. Donne, now one of the professors in the Memphis Medical College, to accompany him to the house of Mrs. B., on Market street, who was in labor with her second child, under the disadvantages of a shoulder presentation. I found Dr. Lewis Rogers at the house, who had made an effort to turn, but was defeated by the strength of the uterine contractions. It was plain, from the patient's behavior, that the pains were still exerted with unusual vehemence as well as frequency, and I proceeded, as soon

as possible, to make an examination; when it was discovered that the left shoulder presented in the second *(scapulo-sacral)* position, with the arm extended and the hand protruding through the vulva. Before the examination was completed, however, the perineum began to be distended, and I remarked to the medical gentlemen, that the child would probably be expelled by duplication, which did accordingly occur in a few moments afterward, in the manner already described. The child, which appeared to be fully developed and of average size, was born dead; its left arm being considerably swollen, and the left side of the neck, with the corresponding cheek, retaining marks of the contusion they had suffered. The labor was not unusually protracted, and the mother recovered without any unfavorable consequences. It should, perhaps, be observed, that the time when this case happened seemed to be propitious for *independent* childbearing; as no fewer than four women, to whom I was called, were delivered by dame Nature, before I could reach their domicils, albeit I made as much haste as is consistent with obstetric dignity."

We need not follow the author through the directions he gives for the relief of such cases. They will be found precise and judicious.

In the next chapter we have the "phenomena and management of the third stage of labor," which comprises, as all understand, the separation and expulsion of the secundines. Believing that the placenta is detached by the tonic and not by the muscular contraction of the uterus, he is not anxious for a return of pains after delivery, but, when he finds the organ gathered into a ball under his hands, proceeds, ordinarily, to deliver the secundines in the absence of them. He says,

"For my own part, I am ready to avow that I seldom wait for pains, or inquire of the patient whether she feels them or not,—my only solicitude being to have the wound contracted, and the placenta naturally separated. These conditions existing, I proceed, without delay, to

extract the placenta, like a good *miller* (pardon the pun), when its turn to be served comes, that is, after the matters, already specified as entitled to precedence have been dispatched."

The subjects of the last chapter are "asphyxia neanatorum, morbid retention of the placenta, and uterine hemorrhage before and after the removal of the secundines."

Asphyxia in the newborn child, Dr. Miller has shown, is often the consequence of the administration of ergot to the mother. "The bowstring," he says emphatically, "is not more murderous than ergotic contractions of the womb;" and we see no reason to controvert the truth of the remark. In the unyielding pressure of the womb upon the fetus, under the stimulus of this article, the placental circulation must cease, and with it all the functions dependent upon vitalized blood. While this derangement is kept up, the action of the heart is found to grow weaker and weaker, until it is no longer perceived. The asphyxia may be simple or apoplectic. By most writers, the latter condition is treated of under the name of apoplexy. In this, while there is insensibility, immobility, and absence of respiration, as in the simple variety, the heart and umbilical arteries may continue to pulsate, and there is also "greater lividity and swelling of the face, the eyes being prominent, and injected with blood, and the pupils dilated." As to the cause, Dr. Miller remarks,

"Apoplectic asphyxia, although it may result from the same causes as the simple, is, I apprehend, most usually induced by severe and long-continued compression of the head, from difficult and instrumental deliveries,—whereby the blood is forced from the surface of the head to the brain, by pressure of the jugular veins, in face presentations, or by compression of the inferior parts of the body, in nates presentations, particularly where the feet are

foremost, in consequence of which the blood is determined to the brain, because it is excluded from the lower parts."

The treatment will vary in the two forms. For the first—

"Simple asphyxia is to be remedied by the employment of all the means calculated to put the respiratory apparatus in motion. Among these, one of the most powerful is, *sprinkling the surface, particularly the face and chest, with cold water.* For this purpose, the fingers should be repeatedly dipped in cold water, and shower the fluid, with considerable force, upon the parts indicated. The practitioner ought to be careful not to have the fingers too wet, so as to drench and chill the child, and after each application, or, at all events, now and then, the surface should be wiped dry and well rubbed. The skin is thus rendered more sensitive, and the probability is greater that the respiratory nerves will be excited through its medium."

With the same view, frictions are to be made on various parts of the body, the palms of the hands and soles of the feet to be excited by slapping them; and in addition camphorated spirits, or ammonia may be applied to the nose, and a little camphorated spirit put in the mouth. These details, though they may appear trivial, are not to be slighted by the young accoucheur. His success in resuscitating the child will often depend upon the address and perseverance with which he uses these appliances. Having directed them all in vain, the only remaining resource is artificial inflation of the lungs, to be accomplished by applying the mouth to the child's mouth and expiring the air pretty forcibly, "taking the precaution to close its nostrils with the fingers of one hand, while those of the other press moderately upon the trachea, to close the esophagus," and insure the passage of the air into the lungs. These various efforts are not to

be hastily relinquished, for in some instances Dr. Miller has known them to succeed, "after the lapse of half an hour of disappointment."

The abstraction of blood is indicated in some cases of simple asphyxia.

"Whenever the child is decidedly plethoric and congested, although the congestion may not reach the height of apoplexy, it is useful and salutary to detract blood from the cord. Nay, ample experience justifies me in saying, that, when even simple asphyxia does not exist, if the child be plethoric and discolored, showing that it has suffered from the manner in which it has been ushered into the world, it will be benefited by losing a little blood, and secured, as I have reason to believe, from the convulsive affections, inflammations, and hemorrhages, to which it would be otherwise obnoxious."

So much for the first variety.

"In the apoplectic form of asphyxia, the great remedy is *bloodletting*, which must be promptly practiced by cutting the umbilical cord, when, if its circulation be active, blood immediately spouts from its arteries. We have been directed to receive the blood in a vessel or upon a diaper, that we may estimate the quantity subtracted. But I take no such precautions, and instead of looking nervously at the blood, look at the child's countenance, watching the chasing away of its purple hue by the rosy tints of health; and when its complexion is good, I arrest the bleeding. While the blood is flowing, the child usually begins to breathe, at first with a sort of convulsive struggle, but presently it breathes deeply, and announces, by its cries, that it has escaped the danger that menaced it at the portal of life. If the umbilical pulsation be faint or extinct, blood cannot be procured so freely from the cord; when the bleeding should be promoted by stroking it and immersing the child, to its naval, in warm water, made more stimulating by the addition of salt or mustard. If blood cannot be obtained in this way, a leech should be applied behind one or both ears. If bloodletting fail

to resuscitate, the other means, already recommended in simple asphyxia, should be tried."

Morbid retention of the placenta may result from atony of the uterus, from a morbid adhesion, or from irregular contraction of the womb. In cases of the first there is no uterine excitement so powerful as the introduction of the hand into the flaccid cavity. Dr. M. declares in reference to the operation,

"My own 'fixed' rule of practice, in this case as well as in retention from the other causes mentioned, is, to have recourse to this manipulation, in an hour after the birth of the child, it being understood, of course, that all other means have been diligently but vainly tried within the hour. The passage of the hand, well lubricated with oil or lard, along a track so recently traversed by the child and yet patulous, from atony, is neither a painful nor difficult operation."

Our limits require us to close here our notice of Prof. Miller's volume; nor indeed is it needful that we should extend it further. Most of our readers are among the friends and pupils of the author, and will lose no time to possess themselves of a copy of his work. We venture to predict that it will prove equal to their expectations, and that it will give him a high rank among American medical authors. Its style is generally unexceptionable. An occasional sin against our great lexicographer, a word, now and then, not found in the dictionaries, and a single pun, however they may appear as blemishes upon a book for the most part elegantly written, are not to be set down as serious drawbacks upon its literary merits.

SELECTIONS

FROM

AMERICAN AND FOREIGN JOURNALS.

Cholera as it prevailed in New Orleans. By E. D. FENNER, M.D.—Dr. Fenner has an interesting letter on the late epidemic in the daily Picayune of the 28th January, from which we make the following extracts. The communication was prepared for the New Orleans Medical and Surgical Journal, but being too late for the February number, the author concluded to send it forth through the present medium. Dr. Fenner remarks that stomach and bowel complaints were prevalent in the city before the Swanton, charged with the introduction of cholera, arrived. He says—

On the 5th of December, (the Swanton arrived on the 11th), I attended a gentleman on Customhouse street, who labored under vomiting, pain and spasms in the bowels, and prostration to such a degree that, if epidemic cholera had been supposed to be here, no person would have hesitated to pronounce him a case. He had no rice water evacutions, but his bowels were rather costive, and he vomited bile; but many such cases have been seen since the epidemic was declared. He recovered after two or three days' illness, and has not been again sick.

Some days previous to this, three or four negroes were attacked with cholera morbus on the same night and at the same house, in Gravier street. They were

promptly treated, and all soon recovered. Similar cases were observed in the practice of a number of physicians in different parts of the city, all going to show, as it appears to me, that the epidemic influence of cholera was gradually being matured and developed in our midst.

Chloroform successfully used.—He says: On the evening of the same day (13th December) that the second case was taken to the Charity Hospital, a man who has resided here for many years, who does business not far from the St. Charles Hotel, came into my office with strong symptoms of cholera. He had not been near the ship Swanton, nor seen any of the passengers. I prescribed for him, and on visiting him at his room, half an hour afterwards, I found him extremely ill, with severe pain in the bowels, copious watery purging, skin bathed in cold sweat, great thirst, and general prostration. His condition was so alarming and he derived so little relief from large and repeated doses of opium, calomel, camphor, and capsicum, assisted by sinapisms, stimulating frictions, etc., that I determined to resort to the inhalation of chloroform. By this means he was made perfectly easy in about two minutes, and remained so until the other medicines he had taken had time to act. He got through the night pretty well, and recovered in a few days from a dangerous illness.

Death of a medical man from his obstinacy in refusing to take medicine.—On the 16th of December, remarks Dr. Fenner, the disease was rapidly increasing, when he was called to the following case:

Dr. J. B. Morgan, of Jackson, Miss., was attacked the night previous, without having committed any other indiscretion than eating some fish and oysters at dinner. When I arrived at his room, I met Dr. Farrell, who had seen him before and had good reason to be provoked at the difficulty he found in convincing Dr. Morgan of the danger he was in and the importance of prompt and vigorous treatment. Dr. Morgan had already passed about thirty liquid evacuations, then had cramps in his legs, and in fact was on the verge of collapse. Dr. M. being an old friend and neighbor of mine, I joined my entreaties to the arguments of Dr. Farrell, and we did all we

could to convince him of the importance of vigorous treatment, but all to no purpose. He insisted that he was not dangerously ill—that he had been similarly affected many a time before, and that if he were not disturbed he would soon be well. The sequel verified our worst apprehensions. He was incorragibly obstinate, dallied too long with a dangerous disease, and was lost.

Relation of the weather to the epidemic.—From the 16th to the 22d the weather was oppressively warm, the thermometer rising as high as 84°. From the 22d it was cool, wet, and gloomy, till the night of the 30th, when there fell a white frost. On the morning of the 1st of January there was another white frost, and from that time the disease declined steadily.

Character of the epidemic.—As to the character of the epidemic, I think I may safely say that it has not been very malignant. In most instances the attack was insidious and mild—generally commencing with a looseness of the bowels, attended with more or less griping, and often accompanied with nausea and vomiting. The latter symptoms almost invariably attended those patients who had committed imprudence in eating. Without descending into minutiæ, I may say that the disease almost invariably commenced with some unusual disturbance of the digestive organs. When this disturbance commanded the attention it deserved, it was generally most easily remedied by the simplest means; but if neglected, it seldom failed to lead on to the most disastrous consequences. This, then, is the *curable stage* of cholera, and almost the only stage in which it can be cured; for if it be permitted to run on till the patient becomes cold and pulseless, ninety-nine in a hundred will inevitably die. By powerful means, reaction may often be established; but the danger is not yet passed—a great majority still die of the consecutive fever. Say what you will about creating *panic* and spreading alarm among the people, I feel no hesitation in asserting that when epidemic cholera is prevailing, every person who has any unusual diarrhea, had better believe he is *a case* and act accordingly. If this simple rule were universally adopted, cholera would soon be rendered compara-

tively harmless. Thus, according to Dr. Watson, one of the ablest English authors, the disease was arrested in London by the establishment of "*Diarrhea Dispensaries*," where the poor were supplied gratuitously with proper remedies. Thousands applied, who would otherwise have waited to *get ill* before going to a hospital to be treated. Who can deny that it would be well to *frighten* the people, if need be, into this degree of precaution? Without it you may rest assured there is no safety.

I deem it unnecessary to enter into a minute detail of the symptoms that characterize cholera, as they are familiar to most persons, whether belonging to the medical profession or not. It may not be amiss, however, to mention a few of the most remarkable ones that attended the late epidemic. Many bad cases were marked by an obstinate vomiting of bile, which continued until death. The vomiting would continue for days, and incredible quantities would be thrown up. In these cases the diarrhea was generally moderate and sometimes absent. The worst cases were those in which the rice water discharges were profuse, as well from the stomach as the bowels. In these, there was no appearance of bile whatever.

A few cases were seen at the Charity Hospital which terminated in black vomit.

When collapse supervened early in the attack, before the system was too much exhausted by copious rice-water evacuations, it was less difficult to bring about reaction, and there was better hope of ultimate success. So far as I know, the only cases of recovery which took place after decided collapse, were of this kind.

Where reaction from a state of collapse was slow and difficult, a sort of typhus fever supervened, which lasted for some days and generally terminated fatally with affection of the brain. The intellect was generally clear and undisturbed to the last, excepting those who died of the consecutive fever. It is marvellous and astounding to witness the mental clearness and composure of some persons dying with cholera! Whilst the attendant relatives and friends are agonized with grief at the sudden and awful calamity, the poor victim is often seen super-

naturally calm and uttering words of consolation with the expiring breath.

Manageable in the forming stage.—Fatality from quack medicines.—The epidemic influence appeared to be felt by almost every person in the city, whether native or foreigners, acclimated or unacclimated. Thousands complained of an extraordinary uneasiness in the stomach and bowels, but in a vast majority of instances it was esily relieved, and but few bad cases occurred amongst those who were prudent, and paid proper attention to the premonitory symptoms. The lower classes of people have evidently suffered most, which may be attributed to ignorance or neglect. The mortality at the Charity Hospital has been very great; yet no one can be surprised at it who visited that institution during the epidemic and witnessed the condition in which the patients were when admitted. Cholera is an insidious disease that generally steals upon its victims, seldom declaring itself openly until it has them completely within its fatal grasp. I have not a doubt that seven-tenths of the people who have recently perished of it in this city might have been saved, if they had procured proper medical aid at the onset of the disease. I presume there is not a physician in the city who has not been called to persons reduced to the most dangerous condition by relying too implicitly and too long upon some of the various "specifics" advertised in our newspapers and lauded by the editors.

Treatment.—The treatment of cholera admits of much variation. Educated physicians everywhere concur in the indications to be fulfilled or what is wanted to be done; but amidst the multiplicity of remedies at their command, of course each one resorts to such as he thinks are best adapted to the circumstances of the case. Doubtless the same object may be accomplished by a variety of means, if it can be accomplished at all; and in our choice of remedies we must be guided by observation and experience. In the treatment of what are called the premonitory symptoms, the first indication is —to check the diarrhea as soon as possible, keeping an

eye at the same time to the important secretions of the liver, kidneys, and skin. For this purpose, physicians very generally resort to opium and its preparations, combined with stimulants and aromatics—or opium with some mercurial, or with quinine. According to the urgency of the symptoms a good prescription may be made of laudanum or paregoric and brandy—or laudanum, spirits of camphor, and tincture of assafetida—or laudanum, essence of peppermint, and compound spirits of lavender—or calomel, opium, and capsicum or camphor—or equal parts of paregoric and tincture of catcehu. The following is a recipe which I found to answer very well, viz:

℞. Sulph. Quinine, ℥i.
Tinct. Opii, ℥iss.
Tinct. Capsici Comp., ℥iii.
Mucilag. Acaicæ with Aqua Cinnamon, f. ℥iv.
M.

Give a tablespoonful and repeat after every two loose stools.

Although opium is so often found in the prescriptions above, I should mention that some physicians disapprove of it and seldom prescribe it in cholera, except by enema. These gentlemen place their chief reliance upon calomel, combined with camphor, capsicum and the like. As to the sulphate of quinine, it appears to be serviceable in almost every kind of disease that occurs in this region. It possesses remarkable intrinsic virtues, and may be used as an adjuvant to many other remedies.

In the treatment of the violent or acute stage of cholera, when there is vomiting, purging, and cramps, we resort to anodynes, antispasmodics, stimulants, calomel, etc., internally, aided by sinapisms, stimulating frictions, etc., externally.

The treatment of the stage of *collapse* is altogether desperate. As before stated, a vast majority of patients die after getting into this condition; and it is no wonder, for the system is then completely drained of its vital fluid. An excessive hemorrhage from a divided artery would not produce a greater prostration than is brought about by the copious serous evacutions of cholera; for all the fluid discharged is abstracted from the blood.

Various remedies are used in this stage, such as sinapisms, blisters, the hot and cold bath, the hot air bath, calomel, carbonate of ammonia, etc., etc. The most remarkable recovery from collapse that I witnessed was effected by very large doses of calomel, washed down with tablespoon doses of laudanum, aided by sinapisms and frictions with spirits of turpentine and sweet oil. This was a lady who was rescued from the very jaws of death. She was afterwards pretty badly salivated, but recovered without serious injury.

Two other physicians attended her with me. In the case of Dr. Morgan, mentioned before, I witnessed the astonishing power of cold water in bringing about reaction from a hopeless state of collapse. Warmth was restored, the pulse returned at the wrist, and life was prolonged two or three days; but still it failed, for the injury sustained was irreparable. The cold bath was administered in this instance at the suggestion of my friends, Dr. Richardson, of Vicksburg, and Dr. Gustine late of Natchez, who said they had derived great benefit from it in the cholera of 1833. Being favorably impressed with the power which the remedy displayed in the case of Dr. M., I resorted to it in two other cases of collapse in private practice; it produced reaction, but they both died for want of vital power to sustain it.

Mortality of the late epidemic compared with that of 1832.—The mortality from cholera at its late visitation, compares most favorably with that of 1832, when it first scourged our city. The number of deaths by cholera from the 12th December, 1848, to the 20th January, 1849, as appears from the reports of the Board of Health, amounts to near 1,400, five hundred and ninety-six of which occurred at the Charity Hospital. We learn from an interesting Memoir on the Cholera of 1832, addressed to the Academy of Medicine of Paris, by Dr. M. Halphen, a French practitioner of this city at that time, that the disease made its appearance about the 25th of October, in the midst of an epidemic of yellow fever; that in a few days it raged severely, and that in the short space of twenty days it killed about 6,000 people. Dr. Halphen says, that the mortality amounted on some days

as high as 500 a day. He estimates the full population of the city then at 50,000, and as cholera broke out during the prevalence of yellow fever, ere yet the absent citizens had returned, and before the customary visiters dared to come in, he does not think the population at that time exceeded 35,000 thus showing the frightful loss of about *one-sixth of the people in twenty days.*— When we read over these sad details, we may well congratulate ourselves upon our happy deliveranc from the late pestilence. True, we have lost about 1,400 people, amongst them a few valuable citizens; but what would have been our fate if so malignant a disease as that of 1832 had broken out in December last, when all our own people were at home, and the city was full of strangers? In 1832, *the living could not afford decent burial to the dead!*

Dr. Halphen states that on some days upwards of one hundred corpses were accumulated at the cemeteries, waiting for interment. Large trenches were dug, into which cart loads of uncoffined bodies were heaped, indiscriminately; and in the dead of night, a great number of bodies, with bricks and stones tied to the feet, were stealthily thrown into the river. The same ratio of mortality at the present time would demand about 20,000 victims. Let us turn from the appalling calculation, and thank God that we have been so mercifully spared.

As in 1832, the epidemic has declined to a stage of comparative security, but the disease has not entirely disappeared. There is as little cholera in New Orleans at the present time, in proportion to the population, as in any other part of the Lower Mississippi Valley.— Whether the epidemic will be rekindled, at the approach of the ensuing summer, remains to be seen. If the miserable condition of the city, as regards cleanliness, will have any influence upon the event, we may certainly expect it. New Orleans must ever continue to be a prey to the most fatal diseases that prevail, until something efficient is done to improve its sanitary condition.

Spread of the disease to other parts.—We learn that cholera is spreading among the plantations along the river,

and also in the interior of Louisiana. To some of these the infection appeared to be directly carried; at others it began without any communication with an infected district.

On the Treatment of Remittent and Intermittent Fever by Quinine in the West Indies. By J. DAVY, M.D.—Dr. Davy says that of 165 cases of remittent fever treated in the hospital at Barbadoes, in the year 1847, only two proved fatal. Similar success has attended the British practice in the West Indies. He says—

In each station in which remittent fever has occurred, quinine, used so as to produce "cinchonism," appears to have been relied on, and is the chief remedial means employed. In Demerara, it has been commonly used without calomel; but aided by aperients, and when there has been irritability of the stomach, by a small dose of the solution of muriate of morphia, (15 drops), with a blister to the epigastrium. Staff-Surgeon Millar, principal medical officer in British Guiana, in his Quarterly Report, (which I would recommend to the attention of medical officers, when they have an opportunity to read it), states: "It requires, on an average, from twenty-five to thirty-five grains of the sulphate of quinine to saturate the system;" (that is, to produce cinchonism;) but this quantity must be given within the space of a few hours—four or five grains every hour, in solution, have been found sufficient, in a few hours, to effect it. If small doses are only given at long intervals, it will have no perceptible effect, long after the quantity mentioned has been given, and will, in all probability, prove so much valuable medicine thrown away. When dulness of hearing and ringing in the ears come on, no more of the medicine need be given; the patient will then be fonnd in a state of apyrexia, and the transition complete and striking.

When quinine is taken by an adult, to the extent of thirty or forty grains, it produces certain cerebral symptoms, the constituents of which are ringing noise in the ears, and more or less deafness.

This set of symptoms, where there is no idiosyncracy, indicates the saturation of the system by the medicine, as ptyalism does mercury, and may be conveniently known by the name of *cinchonism.*

Rare instances occur in which hyper-cinchonism is induced by a very few grains of quinine, accompanied by many nervous symptoms, and formication so severe as to proscribe the use of the remedy. In some—and this may occur in cases which had hitherto been normal—cinchonism has not been induced till after the administration of 72 grains of quinine.

Cinchonism is not peculiar to quinine: by other vegetable febrifuges, such as salicine, angustura bark, and biberine, cinchonism can be induced, but not with the same certainty as by quinine, neither in the same uniform series of phenomena, neither with the same harmlessness.

Cinchonism seldom lasts longer than twenty-four hours, except in some cases of anemia, in which the writer has known it continue upwards of a week.

Quinine has been prescribed by the writer to patients of both sexes and all ages, and where ascertainable, almost invariably to cinchonism, during thirteen years, and probably to the extent of several thousand ounces of the sulphate; and during that time he has seen no case of danger from its effects, with the exception of three or four cases of imputed abortion.

To many the muffled ears of cinchonism is not even disagreeable. Cinchonism is capable of superseding and surpassing that excited condition of the circulation and animal heat known as fever, except when depending on anemia, as symptomatic of inflammation, or its effects.

Quinine is purely a febrifuge: instead of being a tonic or stomachic, it generally induces anorexia, and a relaxed and macerated state of the skin, some tremulousness, and in many cases slight aphonia.

As a febrifuge, the full efficacy of quinine is seldom obtained, unless pushed to cinchonism. Cinchonism is therefore the test and criterion in practice of the full and sufficient use of quinine. It is probable that the protective influence of quinine against fever seldom lasts longer than the manifestation of cinchonism. The ordi-

nary headache of fever does not contra-indicate the use of quinine.

The power of quinine seems to be to cut off the connexion between local irritation and constitutional excitement, to disturb and break the series of morbid elaborations set up in some specific fevers, which terminate, for the most part, in contamination of the blood and loss of vital cohesion of the capillaries. In intermittent fever it is antidotal.

Quinine is of little efficacy in intermittent fever, when exhibited during the paroxysm.

Quinine is of no efficacy in the last stages of continued or remittent fever, where the vascular and thermal excitement have been succeeded by organic lesion or contamination of the blood. It should be given, as is well known, in the intermission of intermittent fever, and in the formative, or in the first stage of continued, remittent, or yellow fever.

The use of quinine against relapses of intermittent fever, whether the disease has been primary or secondary, is one of its most valuable applications.

In using quinine against the paroxysms of intermittent fever, hourly doses of three grains, till twelve doses be given, is the best mode of saturating the system with the remedy. If, however, the disease be a quotidian, with short intermission, six-grain doses hourly, till six doses be given, will be judicious practice.

In the other fevers where quinine is eligible, and the remedy is prescribed during the existence of febrile excitement, the dose, to be efficacious, must be large, and the impression on the disease sudden and overwhelming.

An auxiliary, too, is also required in such cases: twenty-four grains of quinine and twenty grains of calomel, in one dose, is the most powerful resolvent of fever. One or two such doses, with an interval of six hours, and followed by a castor oil purgative, are generally sufficient; but I have prescribed six such doses with efficacy, and I recollect no instance of ptyalism occurring when this treatment was required and adopted, and sometimes there was but mild cinchonism. An intolerance of quinine, or early and intense cinchonism in such cases, is one of the worst prognostics.

In the treatment of simple intermittent fever, or its relapses, calomel is rarely, if ever prescribed by the writer. Sulphate and carbonate of magnesia mixture, or sulphate of magnesia and tartrate of antimony mixture, as a purgative during the hot stage, (if needed), or fifteen drops of solution of acetate of morphine, with a drachm of sweet spirits of nitre, if there is much suffering from muscular pains, headache, or emesis and retching, will speedily relieve the paroxysm; and followed by quinine in combination with purgative doses of rhubarb, will fulfil all the indications for the intermission.

But when a European or North American, probably not long from a cold climate, and during the prevalence of malignant disease, is attacked by fever, and shows to the quick and practiced eye alarming indications, no fear of the injurious after-effects of the mercurial will have weight to withhold the resolvent dose of calomel and quinine. In cases threatening danger to life only need it be used, and I know of no instance wherein the slightest untoward result has been experienced from its use.

The combination of quinine with tartar emetic in pneumonic and bronchitic complications of intermittent is eminently successful. The forces which disturb the remedial power of quinine in fever are chiefly inflammatory and congestive complications, or a loaded condition of the alimentary canal. These must be obviated by appropriate treatment, and the disease rendered as simple or idiopathic as possible, concurrent with the use of quinine. Thus arteriotomy may frequently be required in continued, remittent, or yellow fever; and in intermittent, with tenderness over the spleen, a blister may be required, as an auxiliary to cinchonism.

There is a form of continued, or irregular remittent fever, occurring chiefly in children or adolescents, in which generally no local cause can be discovered, but which is often imputed to worms; but give what anthelmintics you will, no worms may be passed; hence here they are popularly called "stubborn worms." This fever may continue for a week or a fortnight without any contamination of the blood or loss of vital cohesion, and probably depends on intestinal irritation. Danger in these cases chiefly arises from the supervention of some lesion, induced by the long-continued and excessive heat and

violent action of the heart, or sympathetic irritation of the brain. In these cases I use quinine, with immediate and signal efficacy, in the following manner:

The patient is put into a bath, and the cold affusion is applied till the pulse becomes small, and nearly extinct, at the wrist, and the skin cold. He then, while in the bath, gets his dose of quinine, (two or three grains) and is returned to bed without being dried. The bath and the dose of quinine are continued hourly as long as the skin persists warm, when the hourly dose of quinine is due. After five or six baths the skin generally becomes permanently cool, and then the quinine is pushed on to cinchonism, alone, and without the bath. This mode of making an intermission in a continued fever I have never found attended with unpleasant or dangerous consequences, and it will generally subdue the fever after every other method has been tried in vain.

In fever of doubtful origin, and where latent inflammation is suspected, I have frequently used a small cantharides blister as a test; in fact, I never like to pass the blistered surface of a patient without inspecting it, its revelations are often so interesting and important. If, instead of the usual vesication of thin serum and cuticle, the vesication is a bladder of fibrinous coagulum, or suety in consistence, inflammatory action is going on, probably in the neighborhood of the part, and tartar emetic and such like combinations are indicated.

Relapses in intermittents have their determinate periods, the day from the last attack being generally some multiple of seven.

The usual day of relapse among the acclimatized of this colony is the fourteenth or twenty-eighth.

After one or two relapses, the law of each individual case can be ascertained by each patient.

The prophylactic which I have adopted with great success, and in my own person first, many years ago, is as follows:

Two days before the anticipated relapse, three grains of quinine, to be taken thrice daily for four days; after a similar relapse interval, the quinine to be again taken in the same manner; and so on, repeated three or four times successively. The disease is eradicated completely by thus baffling the relapse.—*London Lancet.*

Muriate of Opium.—Dr. Nichol, in the Pharmaceutical Journal, says:

I prepared solutions of opium with acetic, nitric, sulphuric, citric, tartaric, and muriatic acids, and also prescribed them, but the muriatic solution was vastly superior to any in every respect. Each of them produced headache with the exception of the muriatic. I prefer muriate of opium to the tincture, wine, or powder of opium, and also to the muriate and acetate of morphia; in fact, to any other preparation of opium. It never causes headache. My preparation is made according to the following formula:—The best powdered opium, one ounce; muriatic acid, one ounce; distilled water, twenty ounces; mix. Shake this mixture very frequently every day, during fourteen days, then strain and filter. The dose is from twenty to forty drops.—*Ibid.*

Death from Chloroform.—A coroner's inquest was held in New York, on the 20th of January, on the body of a seaman, 31 years of age, who came to his death the previous day by the effects of chloroform, while undergoing an operation in the New York Hospital.

Dr. Buck, the attending surgeon, in the evidence stated that, "on or about the 26th December, I advised that chloroform should be administered to the deceased for the purpose of examining the condition of the rectum, the parts being in such a state of excessive irritability as scarcely to admit of a separation of the nates. The patient recovered from the effects of the chloroform and remained in all respects in the same condition as before its use. On the 19th of January, the deceased being in a sound condition, except the local ailments spoken of, and he having never complained of either his head or chest, and not having suffered from the first administration of chloroform, I directed it to be administered to him for the purpose of performing an operation upon the rectum, and the operation of circumcision to remove a phymosis caused by the chancres; the patient soon became excited by the chloroform, as is usually the case, but not beyond a degree which I have often observed. At this moment my attention was arrested by

my assistant calling for a wet cloth. On examining the patient, I found his face and neck of a leaden hue or color, the eyes tumid, the pulse imperceptible at the wrist, and the whole body relaxed; after two or three gasps he ceased to breathe; every means were promptly used to restore the deceased, but without effect. The chloroform was obtained at Kent's, 91 John street, and not exceeding three drachms was administered from a napkin; a portion of chloroform from the same vial had been administered the day before to a patient without any unfavorable effects; about ten minutes elapsed from the commencement of its administration before death took place. On making a post mortem examination 24 hours after death, I found the face less livid than before; on examining the head, the brain and its membranes presented no other appearances than are seen in persons dying when in full health; the lungs were a good deal congested, and discharged, when cut, a large quantity of bloody serum; the heart was large, its ventricles and auricles were empty; its condition flabby; the substance of the left ventricle rather softer than natural; about half an ounce of a watery fluid was found in the pericardium; the viscera of the abdomen were healthy." —*Medical News.*

Collodion and Asbestos for Toothache.—Mr. Robinson, a distinguished dentist of London, says that he has frequently applied collodion in severe cases of toothache arising from exposure of the nerve. The method he adopts, is to make the patient first wash out his mouth in warm water, in which a few grains of bicarbonate of soda has been dissolved. He then removes from the cavity any foreign substance likely to cause irritation. After drying the cavity, he drops from a point, the collodion, to which has been added a few grains of morphia; after which, he fills the cavity with asbestos, and saturates with the collodion. Lastly, over this he places a pledget of bibulous paper. In a few seconds the whole becomes solidified, and forms an excellent nonconductor

of heat or cold to the exposed nerve. By occasionally renewing this, he has been enabled to effect a more durable stopping than with gold.—*Medical Times.—Ibid.*

Presence of Sugar in the Liver.—MM. Bernard and Barreswill have demonstrated the presence of a notable quantity of sugar in the liver both of man and animals. By fermentation they obtained alcohol from this sugar, a sample of which M. Pelouze exhibited to the Academy. Hitherto no means had been ascertained of obtaining from the liver other than a kind of molasses charged with salts, the sugar of which was uncrystallized. Repeated experiments have enabled MM. Bernard and Barreswill to establish the fact that the sugar, which exists in considerable proportion in the tissue of the liver, is not found in a normal state in any other organ, and that consequently the liver is, on this account, chemically distinguishable from all the other organs of the animal economy. They have satisfied themselves that the liver always contains the same large proportion of sugar, even in animals completely deprived of food containing either sugar or starch, and kept for a long time exclusively on animal diet. They conclude that the existence of sugar in the liver is a physiological fact completely independent of the kind of food taken.—*London Medical Gazette.—Ibid.*

Dr. Sutherland on the Treatment of Cholera.—Persian naphtha had been used with some effect in checking vomiting, but this medicine was so rare, that he could hardly recommend it. Chloroform had been used in the state of collapse without effect; but previous to this stage, it had been found useful in reducing cramps and spasms, and certainly relieved the sufferings of the patients. It was simply applied by being dropped on a piece of flannel, which was held to the mouth of the patient. Bleeding seemed the most effectual treatment at present. In this there was, however, a curious anomaly. At Edinburgh, in 1832, a patient was bled, and recovered, but in

the next thirty-nine cases, in which bleeding was used, the patients all died. It has been tried extensively lately. Out of twelve selected cases at the Edinburgh Hospital, eleven recovered who were bled; and in one gentleman's private practice, four out of five patients recovered. This was at present a promising practice, and the results were such as to encourage its trial. But cholera was certainly an extraordinary disease; treatment which was curative one week, might prove useless on the next. Large doses of opium had been administered with good effect in some cases; but, if used too late, there was the danger of a want of reaction and the patient sinking under the effects of the remedy. The transfusion of artificial serum into the blood had not been beneficial. In the management of patients in the hospital, much depended upon their distribution. There was no evidence that the disease was contagious. In one or two instances this has been asserted; but an examination had shown it to be unfounded. It was, however, certain that cholera had a tendency to spread. In a room where there was a single patient, persons might come into contact with him in any way without danger; but if a number of patients were in one room, and persons remained there for some time, they would be liable to be attacked. This, however, was not contagion. In the Edinburgh Cholera Hospital the patients were at first widely distributed, and there was no spread of the disease. Many more patients having been received, however, the beds were crowded together; and he, (Dr. S.), on entering the wards, observed a peculiar odor, and warned the attendants of their danger. More patients were, however, received, and within twenty-four hours four of the nurses were attacked, three of whom died. Since that time fewer patients had been received; and though it was some weeks since the occurrence, none of the attendants had been attacked. This showed the importance of room and good ventilation in the wards. There was often a difficulty in obtaining external heat in the dwellings of the poor, to apply to patients. This could be done by hot bricks, water, sand, or salt. In some cases the cold water cure had been used with advantage, particularly for children,—wrapping them in a

sheet dipped in cold water, and then covering them with warm clothing so as to produce perspiration; but he approved more of a plan of Professor Christison's, which was to dip a blanket into water as hot as it could be handled and wrap it round the patient. This soothed them very much, and had often been attended with good results. The great thing, however, was unremitting attention on the part of the medical men. This was particularly necessary for the poor, who, unless well looked after, were apt to neglect the prescriptions given.—*Med. Times.—Ibid.*

Course of Cholera—its rate of progress—its mortality—its preliminary stage.—One of the most remarkable facts connected with the Asiatic Cholera is, that, in its present progress throughout Europe, it should follow so nearly the course which it took in 1830–1. The researches of Dr. Laségue have shown that this analogy not only exists in respect to the time at which the places are visited, but in respect to the duration of the disease at each place. The cholera appeared at Tiflis on the 5th May, 1830; at Astrachan on the 21st June; and, ascending the Volga, it reached the Russian province of Kasan on the 17th of September in the same year. In 1847 the cholera made its appearance at Tiflis on the 1st June; at Astrachan on the 31st July; and reached Kasan on the 4th October. In 1830, as in 1847, it took five months to traverse the same district.

In 1830, taking the course of the Dnieper, it reached Stavropol on the 6th September; Novo Tscherkosk on the 10th; Taganrog on the 8th October, and Kiev on the 8th January, 1831. In 1847, the cholera broke out at Stavropol on the 16th July; at Novo Tscherkosk on the 30th; at Taganrog on the 15th August; and at Kiev on the 5th October. Although, as a general rule, those districts, towns, and cities which were visited in 1830, have been attacked by the disease on the present occasion, Dr. Laségue has pointed out one very remarkable exception. In 1830–'1, the disease spread through the provinces on the western frontiers of Russia; but in 1847, from some

singular and unexplained cause, these provinces have escaped; and to this may perhaps be ascribed our immunity from the disease up to the present time.

The ravages of the disease were suspended in the winter of 1830, as well as in that of 1847. In both instances Moscow formed the extreme western limit of the pestilence; and in the spring of 1831, as well as in that of 1848, the disease resumed its course. It appeared in St. Petersburgh on the 25th June, 1831, and it broke out in this city, and spread through it with fearful rapidity, on the 16th June, 1848. It attacked Berlin on the 31st August, 1831, and on the 15th August, 1848. It is well known that the disease first appeared in England, at Sunderland, on the 26th October, 1831; and it will be a remarkable confirmation of the analogies hitherto observed in its progress on the continent, if the rumor that it has now appeared in one of our seaports on the northeastern coast should prove to be well founded. If we are to be guided by this analogy, the cholera may not appear in the metropolis until the ensuing winter. The first cases were announced in London on the 13th February, 1832, and they occurred in the immediate vicinity of the docks. The disease appeared in Paris in the spring of 1832, and that city, therefore, may escape the visitation until the spring of 1849.

It is worthy of remark that in 1830–'1, as in 1847–'8, the cholera has manifested itself chiefly in the great lines of intercourse along freqented roads, and the banks of navigable rivers, attacking chiefly towns and cities where the population was most dense, producing the largest amount of mortality in its first onset, then slowly diminishing in severity, and finally disappearing to reappear in a neighboring locality. According to Dr. Laségue, the greatest rapidity with which the cholera has spread over any locality has not exceeded a rate of from 250 to 300 miles a month. This comparatively slow progress, together with its advance in the face of prevailing winds, is very unlike the usual mode of diffusion of a purely epidemic disease.

It was confidently announced a year since, that the cholera, as it then prevailed on the continent, had lost much of its severity, and was far less mortal than the disease of 1830–'1. This statement, however, is con-

trary to fact. In comparing its fatality in the countries to which its ravages have been hitherto confined, the deaths are, even comparatively speaking, more numerous than on the former visitation. In the Russian empire alone, between the months of April and August, 1848, no less than 505,328 persons were attacked with cholera, and of these 210,836 died—a mortality of more than *forty per cent.* The tables published by the Sanitary Board of St. Petersburgh show, that in estimating the mortality produced by the disease in fourteen of the principal cities of the empire, it appears, that in 1847, of 21,295 attacked, 11,361 died; and in 1830–'1, of 15,559 attacked, 9,018 died. The proportion of those attacked to the total population, was about the same. Thus, in the Russian empire, the proportion of deaths to the attacks was—

In 1830–'1	In 1847
1 to 1·7	1 to 1·8

and the proportion of those attacked to the total population was—

In 1830–'1	In 1847
1 to 19·6 inhabitants.	1 to 19·7 ditto.

Even in Berlin, where it was alleged that cholera had appeared in a much milder form, in the present invasion, we find that from the 15th August to the 1st of September, the attacks were 377, and the deaths 235—or no less than 64 per cent! This great mortality may be ascribed to the severely epidemic form in which the disease has prevailed in that city.

Experience has added one fact of importance in a prophylactic view to our knowledge of this terrible pestilence. As a general rule, the Russian practitioners have observed, that the suddenness of an attack of cholera is apparent, and not real—it is in its severe form, the secondary and intractable stage of a disease which, at its commencement, is comparatively mild and tractable; and which, if taken in time may be without difficulty arrested by simple remedies. Their experience has led them to the conclusion, that diarrhea is a precursory symptom of an attack of Asiatic cholera; and this diarrhea may or may not be attended with pain in the abdomen.—There is very frequently an entire absence of pain—a circumstance which leads to the neglect of means for

remedying what appears to be a temporary disorder, but which may turn out to be the forerunner of the fatal malady. In the diarrhea preceding cholera, when pain has been noticed, it has been simple uneasiness, with a sense of contraction in the bowels. The number of evacuations may be from one to six or more daily: they retain in this stage their fecal color and odor, and are in this respect very different from those alvine discharges, which occur in the more advanced stage of the disorder; for these have no fecal odor or color, and resemble rice water. This simple diarrhea may, therefore, be considered to be the commencement of an attack of Asiatic cholera, this name being applied only to the last stage of the disease.

The diarrheal stage may last only a few hours—two or three days, or even longer. If properly treated, the second stage may be entirely averted—if neglected, this will commence suddenly and violently with those severe symptoms which are commonly the precursors of death. The suddenness of an attack of cholera is, therefore, only apparent—when inquiry has been made, the milder stage although in some instances of very short duration, had really existed, but was overlooked. These views of the Russian physicians are strongly confirmed by the observations made by Dr. Monneret, the French Medical Commissioner at Constantinople and Trebizond. We cannot now enter into the question, whether cholera does or does not in some instances destroy life without a diarrheal stage. This is quite foreign to our object, which is that of endeavoring to find out some warning symptom of the disease, so that the person attacked may be placed on his guard, and induced to seek medical advice without loss of time. Let us admit, for the sake of argument, that of 100 cases diarrhea may not appear in 14: our remarks are directed to the 86 who suffer from this very common premonitory symptom.

It follows, from the preceding observations, when cholera is prevalent in a locality, the slightest disturbance of the bowels requires attention. Considering the possible risk incurred by neglect, the fact that there is only one evacuation more than common, or that the evacuation is more liquid than natural, should receive immediate notice. If the diarrhea really depend on other causes, and

not on cholera, no mischief will follow from its arrest by medicine;—if, however, it depend on the cholera-poison beginning already to operate on the body—then, by resorting to treatment, a life may be saved. It must be remembered that we have no means of determining *á priori* on what the diarrhea depends; and, contrary to popular belief, it appears that the diarrhea of cholera is really of a more mild description than that which arises from any local cause of irritation in the bowels.—*London Med. Gaz.—Am. Jour. Med. Sci.*

On the utility of Alkalies in the Treatment of Rheumatism. By. J. I. FURNIVALL, M.D., Holloway. — Some remarks on the treatment of rheumatism by alkalies are published in the Lancet of 25th November last. I have now, for nearly twenty years, been in the habit of treating rheumatism by means of alkalies, (the liquor potassæ, the carbonate, bicarbonate of potass or soda); and as cases have multiplied in my practice during that long period, I have become more and more satisfied of their efficacy in preventing the supervention of heart disease; while as to their value in curing rheumatism, I beg to refer to reports published about a year ago, by Dr. Wright, of Birmingham.

I have seldom used them alone in severe and threatening cases, though Dr. Wright has done so with great success; but considering that the inflammation and pyrexia were the effects or concomitants of the peculiar state of the blood in rheumatic fever, to remove which state alkalies are recommended, I have combined with the alkalies various other remedies—colchicum, to remove pain and lower excitement, mercury sometimes, etc., etc.

The results of my clinical observations have been these—

1st. That no case of supervening heart disease has ever occurred in my practice since I have administered alkalies in rheumatic cases; nor will they, in my opinion, if the concomitant inflammation and fever have at the same time been properly attended to.

2dly. That many cases of rheumatic fever are on

record which have been energetically treated by medical men of eminence, but without the use of alkalies, in which heart disease has ensued, and proved fatal.

3dly. That mercury and colchicum, separate or combined, and either or both pushed to their utmost extent, will not secure the patient from heart disease, without the addition of alkalies.—*London Lancet.*

Case of Poisoning by Arsenic, in which the symptoms were unusually delayed. By WALTER CLEGG, Esq.—The London Lancet for November contains the following remarkable case:

On Sunday, August 27th, at 5 o'clock in the afternoon, a woman requested me to visit her niece, who had, about noon, taken a teaspoonful of white arsenic. I attended, and found a heavy, stupid looking girl sitting in her chair, more asleep than awake. On rousing her, she reeled about the room as if intoxicated; indeed, I suspected poisoning by some narcotic. But she acknowledged having swallowed "white mercury," and a paper packet was brought to me, from which she had taken the poison, containing about ten grains of a white powder. By means of my pocket-lens, I immediately recognized this powder to be arsenious acid. She vomited once after dinner, but there were no further symptoms until half an hour before she died—that is, at noon the following day.

She had no sickness, no pain, no acrid eructations, no burning taste in the mouth; her face was very pale, and she was faint and giddy. The sulphate of zinc, with mucilaginous drinks, soon produced profuse vomiting, and this was kept up for half an hour. Then another medical man arrived with a jar of the hydrated peroxide of iron; and having some pressing professional engagements, I left her with my friend, who administered large doses of the antidote.

At 9 o'clock at night we visited her together. She had experienced no pain; no unpleasant symptom whatever; she was disposed to sleep quietly. At 10 o'clock the next morning the patient's aunt came to say that her niece was quite well, "might she go a gleaning?" Up

to half past 11 o'clock she continued more than ordinarily cheerful, and was busied in preparing the family dinner. At half past 11 o'clock she suddenly complained of an excruciating pain in the body, with excessive prostration of strength. She went to her bed room to lie down, and at 12 o'clock was found dead, kneeling by the bed-side. Thus she died in about eighteen hours after taking the poison, and within half an hour after the first decided symptom of poisoning was manifested.

Autopsy, forty-eight hours afterwards.—The stomach contained half a pint of a thin, dirty green fluid; the mucous coat was much corrugated, having a fungoid appearnce, very soft, and so fragile that a touch of the finger tore it away. Three or four large reddish brown patches were observed, and these extended into the intestine considerably beyond the duodenum. The peritoneal coats of the stomach and bowels were not inflamed; the lungs and the heart were healthy; the head was not inspected.

It only remains for me to add that the matter vomited and the fluids in the stomach and intestines contained abundant evidence of the presence of arsenic. Minute fragments of a white powder were seen adhering to the mucous coat of the stomach, and these, by the ordinary tests, were proved most satisfactorily to be arsenious acid.

Explanation.—The lower classes in Lincolnshire are very much addicted to the use of opium and laudanum. I have known women with three shillings a week from the parish, spend half a crown in the purchase of opium. I have reason to believe that this girl was an opium-eater. Did one poison mask the evidences of the other? Did the opium suppress the horrible agonies of arsenical poisoning, thus modifying the symptoms, whilst it had no power to interrupt the effects of the deadly drug?

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CHOLERA.

This disease still lingers about New Orleans, and is extending slowly into other parts of the Valley of the Mississippi. As late as the middle of February deaths from it were occurring daily in Nashville and St. Louis, although it had not assumed an epidemic form, as we believe it will not while the weather continues cold. We refer our readers to the communication of Dr. Fenner for much valuable information concerning the epidemic as it appeared in New Orleans. He confirms the truth of the statement so often made, that cholera, in the forming stage, is almost always a curable disease, and that it rarely comes on without giving its subjects fair warning. In view of this well-established fact, it becomes a matter of the greatest importance that cities and towns should provide *Diarrhea hospitals*, to which the poor may apply for medicine and advice on the irruption of the epidemic, and that the people should be taught that *diarrhea* is *cholera* wherever the latter disease is prevailing.

We have seen letters from several New Orleans physicians in all of which it is stated that the premonitory diarrhea, in most cases, was effectually controlled by stimulants and anodynes, without the aid of any mercurial preparation. The fact is gratifying; we are always glad when we can find a disease manageable without mercury; but such is

our confidence in its superiority over all other agents for restoring biliary secretion, that, we confess, we should not feel safe in dispensing with it in any case of diarrhea where cholera seemed to be impending. From what we have experienced in this disease, we should always advise calomel for the premonitory symptoms. The recumbent posture is also important, and hot applications to the skin, and internal stimulants favor the action of the liver. Quinine was found useful in the epidemic at New Orleans, as it was here also in one or two cases in which it was tried. Considering the close resemblance of cholera to malignant intermittent fever, quinine would seem to be the remedy for warding off the dreaded collapse. Few complaints are more tractable than congestive fever; few cases are more hopeless than a congestive chill. The safety of the patient lies in averting the collapse.

In regard to hygienic measures, the most valuable are temperance in all things, cheerfulness, cleanliness, and ventilation. It has been remarked how the poor have suffered from the epidemic everywhere. This is mainly owing to neglect, the disease being permitted to run into the incurable stage before resorting to medicine; but a part is due also to the character of their dwellings. Dr. Christison perhaps goes too far when he says, "cleanliness and ventilation will dissipate any epidemic;" but no one will deny that they are the chief prophylactics against cholera. Every source of impurity ought to be removed from about our houses. Special attention should be paid to the sleeping apartments. They ought to be dry, elevated as much as possible, and so arranged as to admit of a free circulation of air through them. Upper chambers, during epidemics, have proved to be more healthful than those near the ground, and hence, if cholera should become epidemic, servants and all persons sleeping in the basements of houses should be removed to upper stories. Crowding should be avoided, for it has been proved in a multitude of instances that an atmosphere is created about the persons of cholera patients congregated together in which the disease is easily propagated. The question is often asked, "shall I drink brandy to keep off cholera?" We answer, all sudden changes of habit are hazardous. If you are a brandy-drinker, continue to use it while the epidemic prevails, and then abandon the pernicious practice; if you are not accustomed to its use, then do not begin it. Use brandy just as you would any other medicine. It is a valuable remedy when the disorder is upon you, but possesses no power to avert an attack. Practice temperance, exercise cheerfulness, wait upon your

friends and neighbors when overtaken by the disease without any fear of contagion, take medicine, or send for your family physician on the first appearance of diarrhea—those who pursue this course, we fully believe, have but little to fear from cholera.

CHOLERA IN NASHVILLE—RELATION TO LIMESTONE.

We have just received a letter from Dr. H. B. Walton, of Nashville, giving some interesting particulars in relation to the appearance of cholera in that city. He states that the pestilence first appeared there about two months since, and that the average mortality from it had been about two a day. "The weather for the greater part of the time has been warm and wet. But," he adds, "the point to which I wish particularly to call your attention is the predilection of the disease for a certain quarter of the city. It has prevailed almost exclusively about a particular locality. At first, this appeared inexplicable; but since reading the remarks of Dr. Jackson on the connection between cholera and limestone regions, I have supposed that the cause was revealed. A large portion of the city of Nashville is supplied with water from the Cumberland; citizens in other parts use water from springs and wells which, of course, is largely impregnated with carbonate of lime. It is to the latter, with scarcely an exception, that cholera has been confined. Two cases presented themselves which, at first, I supposed, were exceptions to the rule. One was a lady, who resided in that portion of the city where hydrant water is used; the other was a negro man living in the same quarter; but, on inquiry, I learned that the former used water from a spring in the cellar of her dwelling, and that the latter had been laboring in the vicinity of a spring from which he obtained all the water that he drank.

"A large majority of the more aggravated cases have occurred in a small neighborhood, in the vicinity of a spring more highly charged with lime than any other in the city. Whether it is to the use of this water, or to some other cause, that the disease has prevailed in this locality while the city has been exempt from it, is a question not to be determined without farther observation. But the fact is instructive, and, as bearing upon the local origin of cholera, I have deemed it worthy of being recorded."

It may be interesting to remark, in reference to the suggestion of Dr. Walton, that *cholera infantum* has prevailed with much less severity in Nashville since the introduction of hydrant water, as we were assured by physicians there some years ago. Nevertheless, we are not prepared to give our assent to the doctrine that cholera is produced by drinking limestone water. That it manifested a preference for limestone districts, in its former visit to our country, we had occasion to remark two years since, when speaking of the bearing of geology upon disease; but it does not follow that the water had any connection with it. We attempted to show that it was particularly in regions where the older, or blue limestone is the surface rock, that the pestilence was most fatal. But this is not more soluble than the other limestones. The water at Louisville is as highly charged with the grey limestone, as the water at Lexington is with the blue. In Louisville, the epidemic at its height carried off seven a day, in a population of 20,000; in Lexington, in a population of 5,000, sixty persons died in one day. At New Orleans, where there is no limestone, the disease was excessively destructive. At Cincinnati, Maysville, Lexington, and Versailles, all on the blue limestone, its mortality was great. At Nashville, again, at Murfreesborough, Shelbyville, and Pulaski, it appeared in a malignant form, and they are all upon this rock. A few miles south of the latter places, the formation changes, and the epidemic was heard of no where beyond them. These facts are curious. They seem to show a relation between cholera and our geological formations; but they do not reveal the cause of the pestilence.

TONE OF THE BRAIN IMPROVED BY DISEASE.

Instances of this are not rare in the annals of medicine. The case of Dr. Priestley's son has often been quoted. Of a feeble mind by nature, he fell from a window and fractured his skull, and from that time exhibited powers of intellect decidedly improved. Dr. Sewall reported a similar case some years ago. A young man of naturally very limited intelligence lost a portion of his brain by a pistol shot, and after his recovery his friends were surprised to find him vastly improved in the activity and strength of his mind. He lived two years afterwards. Professor Dudley has been in the habit of mentioning in his lectures an analogous case. A young man received a blow on the

front of his head by which the skull was fractured and he lost much brain, but recovered from the immediate effects of the injury, and for a good part of the time that he lived afterwards, evinced a remarkable increase of mental activity, particularly in the faculty of wit. Finally, however, disease of the brain came on and he died an idiot. A case is on record of a woman whose mind was signally improved, for a time, by an attack of typhus fever; but in this, too, the exalted tone of the brain was ultimately lost, and the woman became idiotic. It is related of the celebrated botanist, De Candolle, that in his seventh year he experienced an attack of acute hydrocephalus, from which affection, if children recover, it is well known they are apt to escape with impaired mental powers. It may be a question whether the tone of his brain was not permanently exalted by the disease.

A case in which the mind was improved by disease came not long since under our own observation. In the summer of 1847, when on a visit to the Paroquet Springs, we were applied to by Mr. William Collins, aged 61 years, for advice in his case. He was unmarried, had been a man of laborious habits, and a free liver. At this time he was laboring under extreme hypochondria, with symptoms of subacute gastritis. The least portion of animal food or ardent spirits aggravated all his distressing symptoms. For the depression of spirits he had been advised to use bitters in brandy, but was sensible that he was injured by the prescription. He was fully conscious of the disordered state of his mind, and inquired whether we had remarked anything about him unnatural. We recommended dieting, total abstinence from all stimulating drinks, and constant occupation.

The effect of the change in his habits was immediately manifest. With the subsidence of the dyspeptic symptoms he was relieved of the mental despondency under which he had labored, and rapidly regained his flesh and strength. It is more than eighteen months since he began to improve, and he now enjoys the most excellent health, with an activity of mind quite surprising to his friends. He is cheerful, extremely fond of books, and without ever having composed a line of verse previous to his illness, has become a great rhymer. We saw him a short time since and were assured by him that he learns with greater facility than he did when a boy. All his life, he informs us, he has been disposed to wakefulness, and now he sleeps only four hours in the twenty-four.

It is evident that the tone of our old patient's brain has been improved by disease, and that it is still the seat of preternatural excitement. There is danger that this may give way to changes that would bring on an opposite state of mind, or that it may be so exalted as to induce madness. The last danger would be greater, if in his habits he had not become strictly temperate.

EDITORIAL CHANGES.

Professor Huston, who has conducted the Medical Examiner with so much independence and ability for a number of years, has dissolved his connection with that Journal, and is succeeded by Francis G. Smith, M.D., and David H. Tucker, M.D. The reputation of his successors is a guaranty that the Examiner will maintain its high rank among its cotemporaries, but we are sorry, nevertheless, to part with Professor Huston. He is an able critic, and has always been ready to give his opinions upon the topics and things coming before him This boldness has often brought him into conflict with his professional brethren, but in all his controversies he has evinced courtesy and a love of truth; and in retiring we are sure he carries with him the regrets and good wishes of his readers, and the respect of the profession.

We copy the following from the Buffalo Medical Journal:

"By a copy of the Cleveland Daily Herald, which has been politely forwarded, we perceive that the first number of a new medical journal, entitled the Western Medical Magazine and Review, is to be issued on the first of the present month. It is to be edited by J. J. Delamater, M.D., Professor of Anatomy and Physiology in the Cleveland Medical College, assisted by his colleagues as collaborators. It is to be a bimonthly of 128 pages. We trust that the editor may find in his editorial duties, an agreeable relaxation from the labors and cares incident to his professorial and professional avocations. With such an expectation probably many undertakings of the kind have been commenced; how fully it may be realized, experience will reveal to Dr. D., as it has to those who have anticipated him in a similar experiment. We heartily wish the effort success, extending, as in courtesy bound, to a newly acquired brother of the *corps editoriale*, the hand of fraternal fellowship.

"The able editor of the Southern Medical and Surgical Journal, Professor Paul F. Eve, has given notice that the Journal will be dis-

continued after the present year, owing to want of adequate patronage. He states that the privilege of laboring for his readers during the pas year, has required from his own pocket, an outlay of $900, and h very reasonably concludes that the luxury of serving the medical publi on these terms is too expensive to be longer indulged. That a periodi cal of such merit as the Southern Medical and Surgical Journal shoul require more than the gratuitous services of the editor to secure ampl support, is a stigma upon our southern brethren which we sincerely hope they will not consent to bear. We anticipate that the effect of th notice referred to, will be to secure a list of *paying* subscribers, tha will not only justify the continuance of the work, but furnish a complimentary testimonial to the value of the editor's past labors."

We cordially adopt these sentiments. We hope and believe better things of the physicians of the South, than that they will suffer a journal so faithfully edited as that of which Professor Eve has had charge, to fail for want of pecuniary support."

PERSONAL PORTRAITS.

In a complimentary notice of the letters of our Foreign Correspondent, the editors of the Medical Examiner make the following remarks respecting a practice which is but too common among travelers:

"Of the propriety and justice of describing personal appearance, peculiarities, and opinions, of living men, without their knowledge or consent, we have never been satisfied. Very often, the reporter has enjoyed but limited opportunities for judging of what he relates, and is, therefore, liable to commit gross, although it may be, unintentional errors; nor can any thing, in our opinion, justify the breach of confidence which is committed by those who disregard the sanctity of the fireside, and expose scenes which their eyes have been permitted to behold only from the promptings of a generous hospitality.

"In allusions of this kind, our young author has manifested a delicacy which contrasts favorably with the observations of some older tourists, who have preceded him in the same line of narration; generally, indeed, he has confined himself to a notice of professional rather than personal matters, and when speaking of the eminent men whom he saw, their opinions and practice on matters of professional interest alone are mentioned, and mostly, we think, in a way not calculated to offend."

The professional character of every man is public property. Our correspondent, as remarked by the editors of the Examiner, confined himself closely to professional topics, and whenever he alluded to personal peculiarities they were such as were brought out by the public position of the individuals.

DEATH OF MR. SAMUEL COOPER.

Mr. Samuel Cooper, author of the "Surgical Dictionary," and "First Lines of Surgery," died in London on the 9th of last December, in the 68th year of his age, by a singular coincidence, on the anniversary of the death of his friend and colleague, Mr. Liston. At an early age, Mr. Cooper received an appointment in the medical staff of the army, and was present in the memorable Walcheren expedition. At the time of his death he was Professor of Surgery in the University College of London, which chair he had filled for seventeen years. He was also surgeon and consulting surgeon to the University Hospital from the time of its foundation until he left it, in April last, in consequence of a misunderstanding with some of his colleagues, to the irritation and mortification resulting from which the attack of retrocedent gout which caused his death, is generally attributed in his own country.